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Apelon Distributed Terminology System (DTS)

DTS Editor Users Guide

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Introduction

The viewing tool in the DTS Editor allows you to view subscription content in **Ontylog** and **Thesaurus** namespaces within your knowledgebase (in DTS each **namespace** represents a separate **source terminology**). All of your namespaces together comprise your **knowledgebase**. You can configure a tree display for a broad view of a selected subscription namespace, then select an individual item (e.g., concept, term) for which to view detailed information.

The edit functions in the DTS Editor allow you to create and maintain new content in one or more **local** namespaces. Each user-defined local namespace that you create can contain new concepts and/or terms that reside outside of any of your subscription namespaces.

In the local namespace you also can **map** relationships (i.e., create associations) between selected concepts or terms in your local content, and specific concepts or terms in subscription namespace content. For example, you can create a mapping between a single concept in an Ontylog subscription namespace, and a newly created synonymous term in your local namespace.

Namespaces

Ontylog Namespaces

An Ontylog namespace is one created using the Ontylog language, developed using Apelon's Terminology Development Environment (TDE) product. TDE, and Ontylog, allow you to build and maintain knowledgebases through the use of description logic. Concepts and terms in Ontylog are organized into a taxonomy through a process called **classification**. Refer to the *Ontylog Namespaces* discussion later in this guide for more on Ontylog namespaces.

Ontylog Extension Namespaces

You cannot perform edits directly **to** an Ontylog-type **subscription** namespace using the DTS Editor. Using the DTS Editor, you can (locally) create new concepts and concept relationships for each Ontylog subscription namespace by creating an **Ontylog Extension** namespace.

You link the Ontylog Extension local namespace to the specific Ontylog subscription namespace for which you want to add or modify content. Each Extension namespace is comprised of **supplemental** content that you create locally, content that you can **classify** against the linked Ontylog subscription content.

Classification of a namespace produces the namespace's **inferred view**, which takes concept and role relationships into account. If necessary, classification positions concepts in the namespace hierarchy based on these relationships.

You may link each Extension namespace to only a **single** Ontylog subscription namespace. You can, however, create multiple Extension namespaces that link to the same Ontylog subscription namespace.

Refer to the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for procedures on creating and classifying Ontylog Extension namespaces, and for instructions on installing and deploying the files necessary to perform classification.

Thesaurus Namespaces

A Thesaurus namespace in DTS is one in which concepts and terms are organized based on relationships (**associations**) with other concepts. The DTS Editor provides view capabilities for subscription namespaces with the type of **Thesaurus**. You can create a new "local" namespace that is a Thesaurus type. In the local namespace you can create new content, and establish mappings to content in subscription namespaces (both Ontylog and Thesaurus) as well as other local namespaces. Refer to the *Thesaurus Namespaces* discussion later in this guide for more on Thesaurus namespaces.

Subsets of Namespaces

A **subset** is a segment of concepts that you can create from a specific namespace, based on selection parameters that you define. Using the **Subset Editor** functions available to you from the *DTS Editor Main* window, you can create and maintain a subset from a subscription or local namespace, or from a (classified) extension namespace. If the namespace you are viewing in the DTS Editor has one or more subsets created for it, you can highlight each concept in the view that was selected for a subset. Refer to the *DTS Subset Editor Users Guide* for procedures on subset creation and maintenance in DTS.

Purpose of This Guide

This guide includes procedures for using the view capabilities in the DTS Editor to create tree views of subscription content in Ontylog and Thesaurus namespaces. Detail views are available for each selected concept/term in a tree view. Illustrations of different view scenarios are provided.

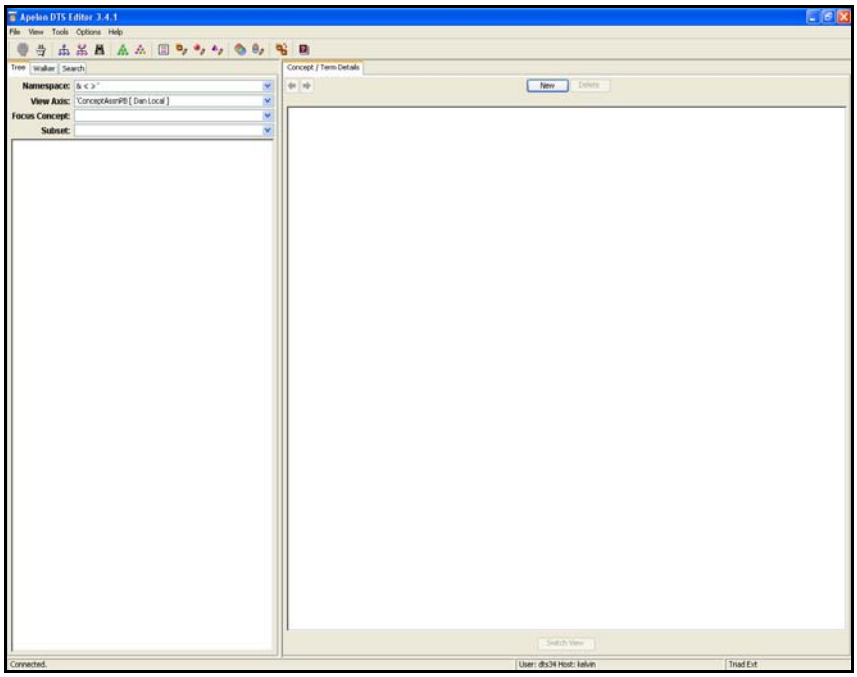
The guide also includes procedures for adding and maintaining one or more **local** namespaces, as well as the new content within. This content includes new concepts and/or terms, and the attributes related to each (e.g., properties, associations). Procedures for creating new associations between concepts and/or terms within a namespace are provided, as well as procedures for creating associations across namespaces. Illustrated examples are included.

Connect to the DTS Editor

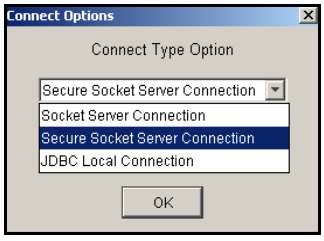
Connection and Logon

Follow this procedure to establish a connection to the server where your knowledgebase resides. If you intend to use a secure socket connection, confirm that the user has been created before you start the DTS Editor; refer to the *Managing Users* discussions in the *Apelon DTS Server Operations Guide* for procedures on adding and maintaining users.

Start the DTS Term Editor from the *Windows* **Start** menu (**Start>Programs> Apelon>*DTSInstall*>Apelon DTS Editor**, where *DTSInstall* represents the current version). If there is a shortcut for the DTS Editor, click the shortcut icon. The *DTS Editor Main* window displays.



At this point you must specify the desired connection to the DTS Server. Select **Connect Options** from the **File** menu. When the *Connect Options* window displays, click on the dropdown field to display the available connection options.

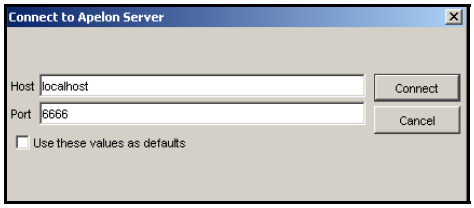


Select a **Socket** server connection, **Secure Socket** server connection, or a **JDBC Local** connection. To use a secure socket connection, the DTS Server must be configured to

use Secure Server Mode, and a user must have been created. Click **OK**. In the following discussions, refer to the procedures specific to the connection type you selected.

Socket Server Connection

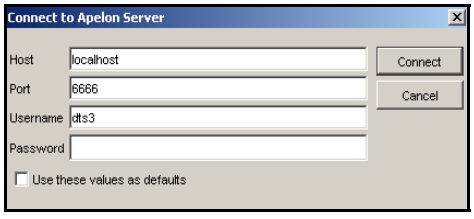
1. Confirm that the Apelon DTS Server is running (**Start>Programs>Apelon>** ***DTSInstall*****>Start Apelon DTS Server**).
2. Select **Socket Server Connection** from the *Connect Type Option* dropdown field, then click **OK**.
3. Select **Connect** from the *DTS Editor Main* window **File** menu. The *Connect to Apelon Server* window displays.



4. Specify the connection *Host* and *Port* for the DTS Server (i.e., the name of the machine where your DTS Server is running). To recall these values for future sessions, click *Use these values as defaults*.
5. Click **Connect** to establish the socket server connection to with your DTS Server. The *Content License Agreements* window displays.

Secure Socket Server Connection

1. Confirm that the Apelon DTS Server is running (**Start>Programs>Apelon>** ***DTSInstall*****>Start Apelon DTS Server**).
2. Select Secure Socket Server Connection from the *Connect Type Option* dropdown field, then click OK.
3. Select Connect from the *DTS Editor Main* window File menu. The *Connect to Apelon Server* window displays.



4. Enter your *Host* name (for the machine where your DTS Server is running) and *Port* number to access the DTS Server, your *Username*, and *Password*. To recall these values for future sessions, click *Use these values as defaults*.

5. Click Connect to establish the secure socket server connection to with your DTS Server. The *Content License Agreements* window displays.

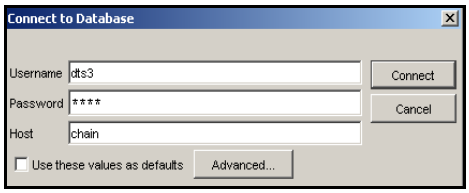
JDBC Local Connection

When you install DTS (using the **InstallShield** wizard) you must specify the type of database (**Oracle** or ***Microsoft* SQL Server** database) on which you will maintain your DTS data, as well as the driver through which the DTS Server and the DTS Editor will access that data. The appropriate DTS configuration files (e.g., **drivers.xml**) are updated to reflect your selection.

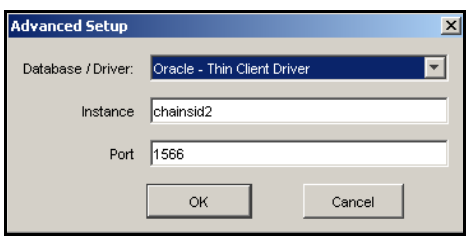
If you maintain the knowledgebase in a *Microsoft* SQL Server database, you have the option of using either of these drivers:

- *Microsoft* JDBC driver (the required **SQL Server JDBC** driver is installed automatically.
- I-Net Sprinta JDBC driver (Apelon recommends that you obtain and install the **iSprinta Enterprise**™ driver, which provides the multiple connections required to use DTS).

1. Select **JDBC Local Connection** from the *Connect Type Option* dropdown field, then click **OK**.
2. Select **Connect** from the *DTS Editor Main* window **File** menu. The *Connect to Database* window displays.



3. Enter your *Username*, *Password*, and *Host* name (for the machine where your database is located). To recall these values for future sessions, click *Use these values as the defaults*.
4. If your configuration requires you to modify the default Oracle instance and port designations, or to choose SQL Server, click on **Advanced**. The *Advanced Setup* window displays.



5. If you choose **Oracle – Thin Client Driver** in the *Database/Driver* field, you can accept the default database name in the *Database name/instance* field, and the default port number in the *Port* field, or override the defaults to connect to the desired database. Click **OK**.
   - If you indicated during DTS installation that you maintain your DTS knowledgebase in a *Microsoft* SQL Server database, and you have obtained and installed the **iSprinta Enterprise** driver, then **SQL Server – Sprinta Driver** is included as an option in the *Database/Driver* field.

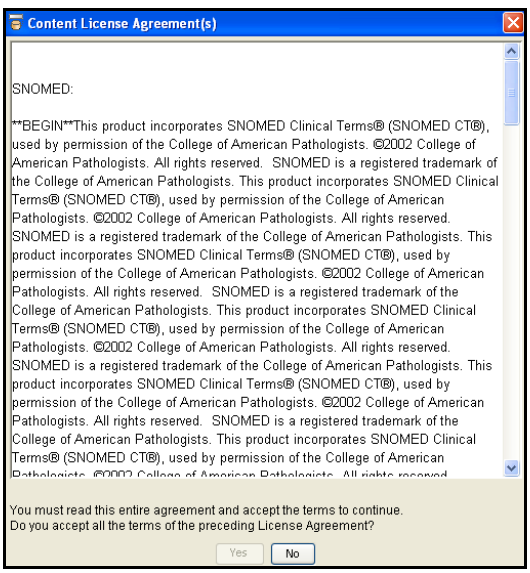
   - If you indicated during DTS installation that you maintain your DTS knowledgebase in a *Microsoft* SQL Server database, and selected the Microsoft driver that is provided with DTS, then **SQL Server – Microsoft** is included as an option in the *Database/Driver* field.

   In the displayed *Database/Driver* field, specify your SQL Server/driver selection. In the displayed *Instance* field, specify the SQL Server named instance (if you are using a default instance, leave the field blank).

6. Click **Connect** on the Connect to Database window to establish the JDBC connection. The *Content License Agreements* window displays.

Content License Agreements

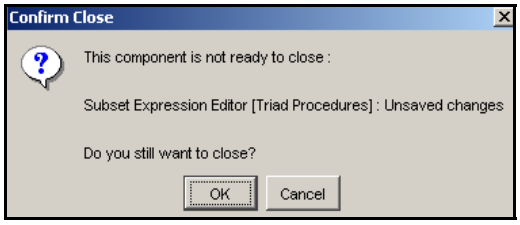
The *Content License Agreement(s)* window displays immediately after you establish your database connection.



In order to use the DTS Editor, use the **Scroll Bar** to list license terms for all of the vocabularies to which you subscribe. Click **Yes** (which is enabled after you read the entire agreement) to accept the terms; the *DTS Editor Main* window redisplays.

Disconnect From the DTS Editor

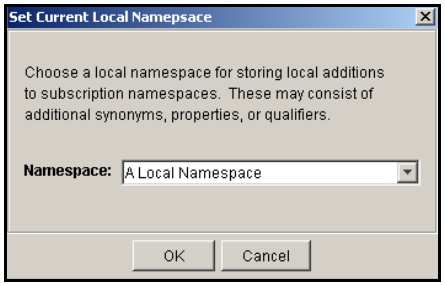
Select **Disconnect** from the **File** menu, or click the toolbar **Disconnect** icon. If there is unsaved data (new or modified) in one of the DTS Editor components, the following confirmation window displays.



Click **Yes** to close the component and disconnect without reviewing or updating unsaved data; displayed floating panels are closed when you disconnect. Click **Cancel** to disregard the disconnect request.

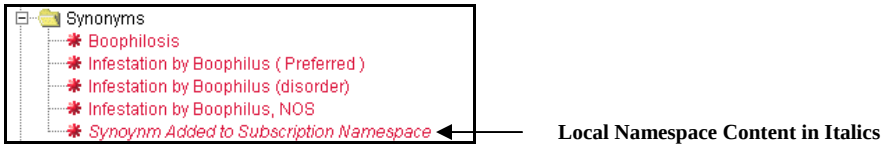
Set Current Local Namespace

When you first log into the DTS Editor you have the option to set a **current local namespace**. Select **Set Current Local Namespace** from the **Options** menu, or select the **Set Current Local Namespace** icon from the *Main* window toolbar options. The *Set Current Local Namespace* window displays.



The namespace selected here becomes the default local (writable) namespace for the addition and maintenance of property types, association types, and qualifier types to be used when you add local content to a subscription namespace.

Thereafter, you can add a new property, synonym, or association to a concept or term in a subscription namespace, or add a qualifier to a property or an association, as long as the appropriate attribute type (e.g., **property type**) exists in the current local namespace. You have the option of changing the local namespace at a later time. Attributes added in this manner to a concept or term in a subscription namespace are listed in ***italics*** in the **Concept/Term Details View**, as well as in the **Concept Tree View** (**Container** and **Inline** versions of the view). Note the illustration.

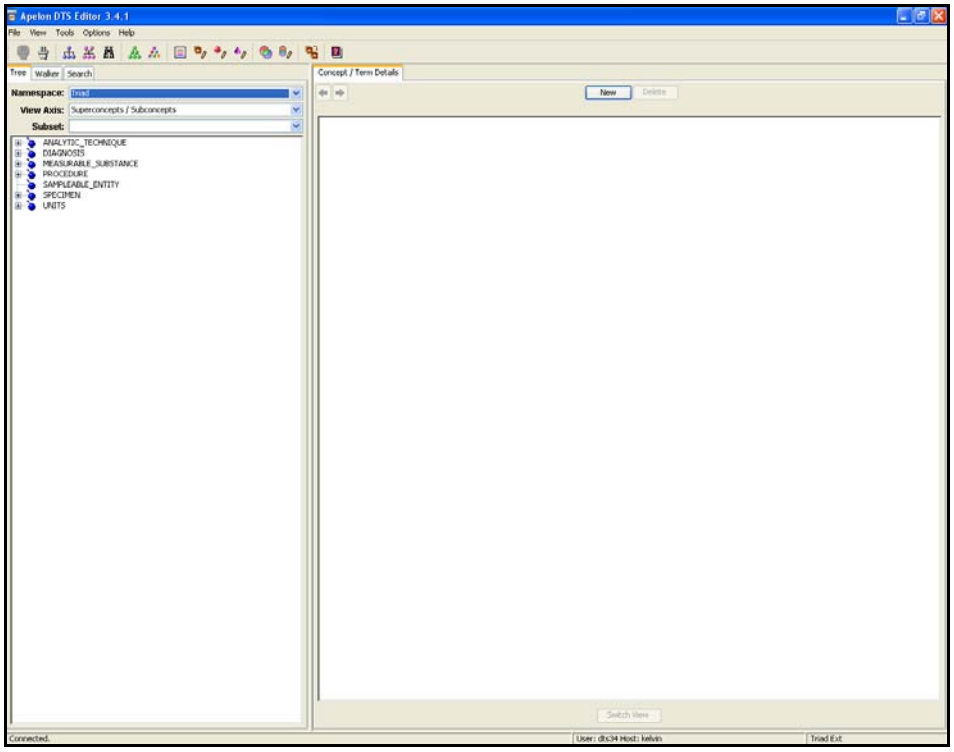


The attributes themselves actually are written to the local namespace. No database updates occur for the subscription namespace itself. Refer to the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for procedures on creating an Ontylog Extension namespace that you can employ as a local namespace.

The DTS Editor Main Window

The *DTS Editor Main* window displays as soon as you accept the terms of the Content License Agreements (click **Yes** on the *Content Licenses Agreements* window). The DTS Editor version number displays in the window header. The window consists of two main display panes. The panels available in the left pane of the window relate to global navigation and viewing tasks.

When the window first opens, the **Tree** tab is selected and the *Concept Tree* panel displays in the left pane. When you select a namespace from the *Namespace* dropdown field, this tree unfolds the taxonomy to display the concept hierarchy for the selected namespace in the knowledgebase.



You can navigate through the concept tree to locate concepts for view.

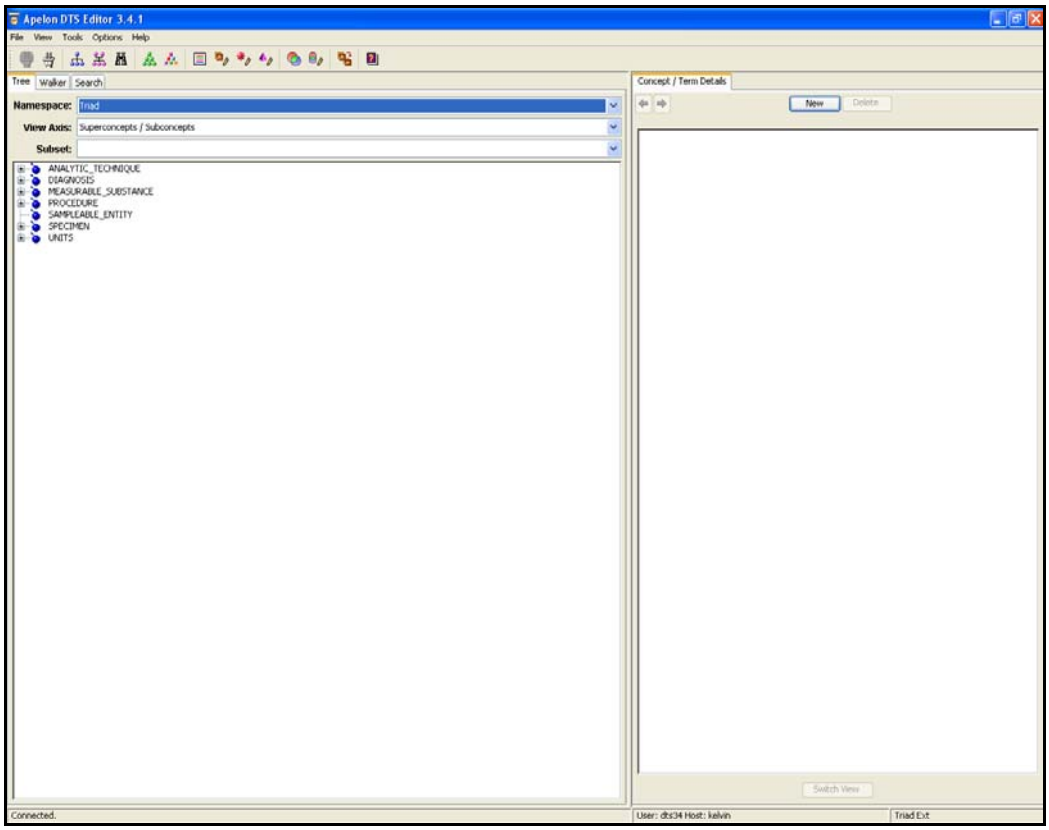
The *Concept/Term Details* panel displays in the right pane. Here you may view concept details, edit concept properties locally, and add new concepts. Each of these panels is discussed in more detail later in the guide.

The **Status Bar** located at the bottom of the window indicates whether or not you are connected to the database. The DTS Server connection host and port display as well.

The *Windows* **Text Edit** functions **Cut**, **Copy**, and **Paste** are available in many of the DTS Editor data entry fields through keyboard shortcuts (**CTRL-X**, **CTRL-C**, and **CTRL V**, respectively).

Modify Main Window Panel Sizes

You can modify the display by clicking and dragging the edge of the pane you want to resize. Note the resized panes in the following illustration.



The resized panel settings are retained if you disconnect from the DTS Server, then reconnect.

DTS Editor Main Window Menu Options

File Menu

Connect - Establishes your connection to the DTS Server and the knowledgebase (you also can click the **Connect** icon in the toolbar).

Disconnect - Disconnects you from the DTS Server and the knowledgebase (you also can click the **Disconnect** icon in the toolbar).

Connect Options - Displays connection options on the *Connect Options* window; select the desired connection type to the DTS Server, or a direct connection to a database.

Exit - Ends this DTS Editor session and exits the program.

View Menu

Status Bar - Lets you toggle the **Status Bar** on or off. The **Status Bar**, located at the bottom of the window, indicates if you are connected to the knowledgebase, and identifies the user and host connection.

Tools Menu

New Concept Tree - Displays the *Concept Tree* panel as a floating window (you also can click the **Open New Tree** icon in the toolbar). Use this window in addition to the *Concept Tree* panel, which you can display by clicking the **Tree** tab in the left pane.

New Concept Walker - Displays the *Concept Walker* panel as a floating window (you also can click the toolbar's **Open New Walker** icon). Use this window in addition to the *Concept Walker* panel, which you can display by clicking the **Walker** tab in the left pane.

New Search - Lets you open the *Search* panel as a separate window (you also can click the **Search** icon in the toolbar). The *Search* panel allows you to search for a concept based on the parameters you specify. Use this window as an alternative to the *Search* panel, which you can display by clicking the **Search** tab in the left pane.

Concept/Term Details - Displays the *Concept/Term Details* popup window (you also can click the **Open New Details Panel** icon in the toolbar. The *Concept/Term Details* window lists detailed information for any concept you drag and drop on the window from anywhere else in the application.

Associations - Displays the *Association Editor* floating window, which allows you to create and maintain associations between concepts or terms within the same namespace, or across namespaces (you also can click the **Open Association Editor** icon in the toolbar). For each association you can specify one or more established **qualifier types** and **values**; these provide additional detail regarding the nature of a concept or term association (e.g., **Usually**).

Properties - Displays the *Property Editor* floating window, which allows you to view, create, and maintain properties for a concept or term (you also can click the toolbar's **Open Property Editor** icon). A property is a piece of user-defined information that can be linked to a concept or term, and can be used for any purpose. For each property you can specify one or more established **qualifier types** and **values**; these provide additional detail regarding the nature of a concept or term property (e.g., **Current**).

Synonyms - Displays the *Synonym Editor* floating window, which allows you to establish a synonymous term for a concept (you also can click the **Open Synonym Editor** icon in the toolbar).

Association Types - Each association you create between two concepts or terms must be assigned a specific type to indicate the nature of the relationship (e.g., one concept is **Broader Than** the other, or is a **Parent** of the other). Click this option to display the *Association Types* window, which allows you to view, create, and maintain association types.

Property Types - Each property that is assigned to a concept has a property type, which defines the nature of the property (e.g., **Document**, **Code**). Multiple values can be related to each property type. Click this option to display the *Property Types* window, which allows you to view, create, and maintain property types.

Qualifier Types - Qualifier types, and their associated values, provide additional detail regarding the nature of a concept or term property (e.g., **Current**) or a concept or term association (e.g., **Usually**). Click this option to display the *Qualifier Type Editor* floating window, which allows you to view, create, and maintain qualifier types.

Kinds - Displays the *Kind Viewer* floating window, which lists all **kinds** that have been defined within all of the **Ontylog** namespaces in your knowledgebase. Each concept in an Ontylog namespace must be assigned a kind to identify the concept's type (specimen, procedure, etc.).

This listing of established kinds may be helpful if you define new concepts in an ***Ontylog Extension*** namespace. Refer to the *Create and Maintain Ontylog Extension Namespaces* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on concept kinds.

Role Types - Displays the *Role Type Viewer* floating window, which lists all **roles** that have been defined within the Ontylog namespaces in your knowledgebase. Each concept in an Ontylog namespace can be assigned one or more roles (each defined by a **Role Type**); each role describes a user-defined relationship between different established **kinds**.

This listing of established role types may be helpful if you define new concepts in an ***Ontylog Extension*** namespace. Refer to the *Create and Maintain Ontylog Extension Namespaces* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on concept roles.

Namespace - Displays the *Namespace Editor* floating window, which allows you to view, create, and maintain the namespaces in your knowledgebase.

Classify - This option is enabled only if the current local namespace is an **Ontylog Extension** namespace. Click this option to perform classification on the current Extension local namespace (you also can click the **Classify** icon in the toolbar). Refer to the *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespace classification.

Classify Errors - This option is enabled only if the current local namespace is an **Ontylog Extension** namespace. Click this option to display the *Classify Errors* window, which lists errors that occurred during classification of the current Extension local namespace. Refer to the *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespace classification.

New Subset List - Opens the DTS Editor *Subset List* panel as a floating window (you also can click the **Open Subset List Panel** icon in the toolbar). The *Subset List* panel allows you to search for and list the namespace subsets that are available in your DTS knowledgebase. Refer to the *DTS Subset Editor Users Guide* for procedures on creating and maintaining DTS subsets.

New Subset Editor - Opens the DTS Editor *Subset Expression Editor* panel as a floating window (you also can click the **Open Subset Expression Editor** icon in the toolbar). The *Subset Expression Editor* panel allows you to edit the filters through which namespace subsets are created. Refer to the *DTS Subset Editor Users Guide* for procedures on creating and maintaining DTS subsets.

Options Menu

Code and ID Generator - Concept codes and IDs are concept identifiers generated automatically and assigned to each new concept you create using the DTS Editor. The options available here allow you to customize the format of the codes and IDs assigned to new concepts.

Set Current Local Namespace – Lets you select the default local namespace, in which you can add and maintain local content for a subscription namespace. You also can click the **Set Current Local Namespace** icon in the toolbar.

Help

Help Topics - Provides online help (you also can click the **Help** icon in the toolbar).

About DTS Editor – The DTS Editor version, copyright date, etc.

DTS Editor Main Window Toolbar Options

Most of the options available from the menus on the *DTS Editor Main* window also are available from the window toolbar.

 **Connect to DTS Server** - Establishes your connection to the DTS Server and the knowledgebase (you also can click **Connect** in the **File** menu).

 **Disconnect** - Disconnects you from the DTS Server and the knowledgebase (you also can click **Disconnect** in the **File** menu).

 **Open New Tree** - Displays the *Concept Tree* panel as a floating window (you also can click **New Concept Tree** in the **Tools** menu). Use this window in conjunction with the *Concept Tree* panel that you can display by clicking the **Tree** tab in the left pane.

 **Open New Walker** - Displays the *Concept Walker* panel as a floating window (you also can click **New Concept Walker** in the **Tools** menu). Use this window in conjunction with the *Concept Walker* panel that you can display by clicking the **Walker** tab in the left pane.

 **Search** – Displays the *Search* panel as a separate window (you also can click **New Search** in the **Tools** menu). The *Search* panel allows you to search for a concept based on the parameters you specify. Use this window in conjunction with, or as an alternative to, the *Search* panel that you can display by clicking the **Search** tab in the left pane.

 **Set Current Local Namespace** - Allows you to select the default local namespace, to which you can add and maintain local content for a subscription namespace (you also can click **Set Current Local Namespace** in the **Options** menu).

 **Classify** - This icon is enabled only if the current local namespace is an **Ontylog Extension** type namespace. Click to perform classification on the current Ontylog Extension local namespace (you also can click **Classify** in the **Tools** menu). Refer to the *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespace classification.

 **Open New Details Panel** - Displays the *Concept/Term Details* popup window, which lists detailed information for any concept you drag and drop on the window from anywhere else in the application (you also can click **Concept/Term Details** in the **Tools** menu).

 **Open Association Editor** - Displays the *Association Editor* floating window, which allows you to create and maintain associations between concepts or terms within the same namespace, or across namespaces (you also can click **Associations** in the **Tools** menu).

 **Open Synonym Editor** - Displays the *Synonym Editor* floating window, which allows you to establish a synonymous term for a concept (you also can click **Synonyms** in the **Tools** menu).

 **Open Property Editor -** Displays the *Property Editor* floating window, which allows you to view, create, and maintain properties for selected concepts (you also can click **Properties** in the **Tools** menu).

 **Open Subset List Panel -** Displays the *Subset List* floating window (you also can click **New Subset List** in the **Tolls** menu). The *Subset List* panel lists the namespace subsets that are available in your DTS database. Refer to the *DTS Namespace Subset Editor Users Guide* for procedures on creating and maintaining DTS subsets.

 **New Subset List** - Displays the *Subset Expression Editor* floating window (you also can click **New Subset Editor** in the **Tools** menu). The *Subset Expression Editor* panel allows you to edit the filters through which namespace subsets are created. Refer to the *DTS Namespace Subset Editor Users Guide* for procedures on creating and maintaining DTS subsets.

 **Help** - Provides online help (you also can click **Help Topics** in the **Help** menu).

DTS Editor Main Window Tab View Options

The following "tab" options are available when the *DTS Editor Main* window opens initially. Each brief introduction that follows outlines the view panel displayed when you click the appropriate tab. Detailed procedures and discussions on use of these panels are provided later in the guide.

Tree - The *Concept Tree* view panel displays as the default in the left pane when the main window first opens. When either of the other panels (**Search** or **Concept Walker**) displays in the left pane, click the *Tree* tab to redisplay the concept tree. This tree unfolds the taxonomy to display the concept hierarchy in a selected namespace in the knowledgebase, or an association tree.

Walker - Displays the *Concept Walker* panel, which lists the parents and children of a concept in the selected namespace.

Search - Displays the *Search* panel, which allows you to search for concepts based on the parameters you specify (**Name**, **Property**, **Role**, etc.).

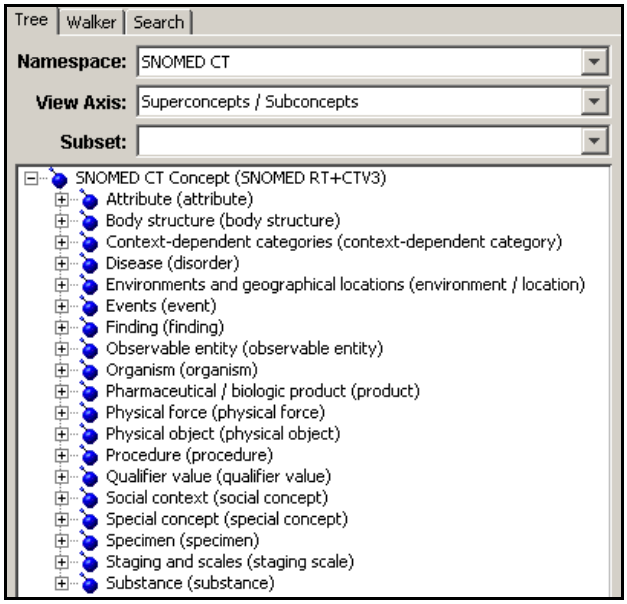
DTS Editor Keyboard Options

Press the **Enter** key to perform the default action (e.g., **Apply**, **Close**, **OK**, etc.) in any panel or popup window. Press the **Esc** key to close any displayed popup window.

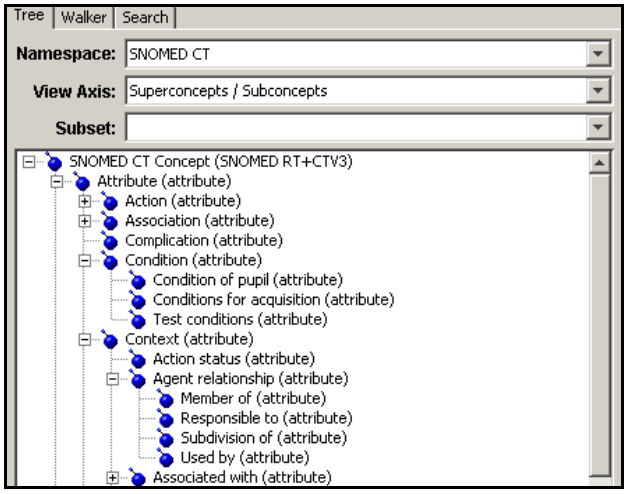
View Concept Tree – *Tree* Tab

The DTS Editor *Concept Tree* panel lists concepts in a "tree" format for easy viewing. As mentioned earlier, the *Concept Tree* panel displays in the left pane when the *DTS Editor Main* window first opens, or when you click the *Tree* tab. Top-level concepts ("nodes") in the hierarchy display in a collapsed view (note: if this is an association tree, no nodes display until you configure the tree).

Note the top-level concepts illustrated.



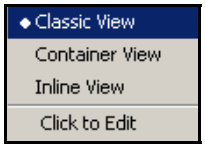
You can expand or collapse segments of the tree to display only those elements you want.



Concept Tree Panel Display Preferences

Ontylog Tree Preferences

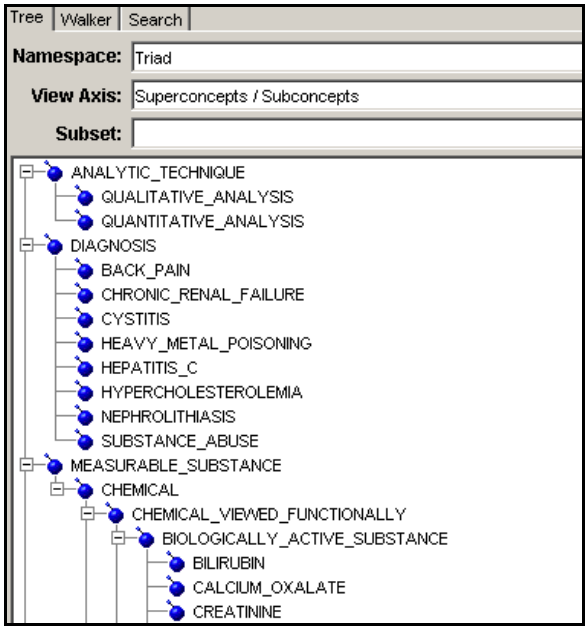
The *Concept Tree* panel makes concepts and their relationships easier to view and comprehend. The following discussions explain how to format the display of data for an Ontylog tree in the *Concept Tree* panel. Right-click on the white space in the *Concept Tree* panel to display the following popup menu for an Ontylog tree.



Any changes you make to the *Concept Tree* panel display settings are retained if you disconnect from the current session (**File>Disconnect**) or exit the DTS Editor (**File>Exit**).

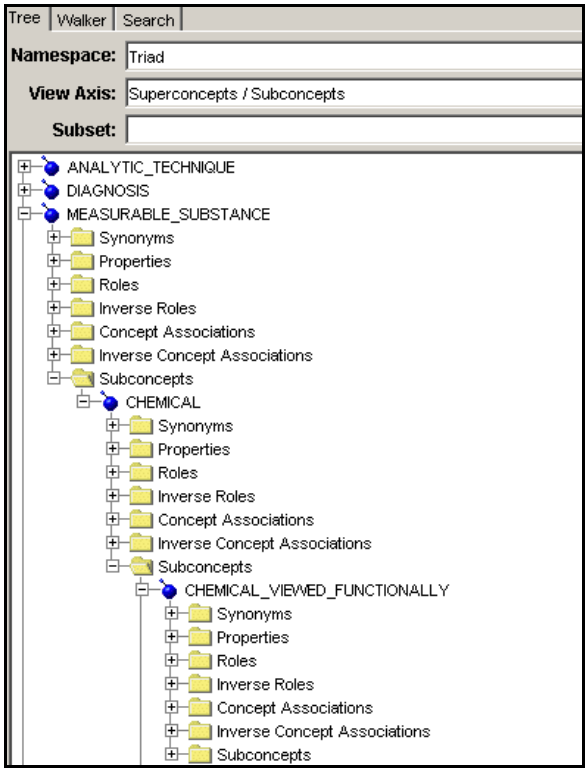
Classic View

Select **Classic View** from the popup menu to display concepts with single or multiple parents in the concept tree.



Container View

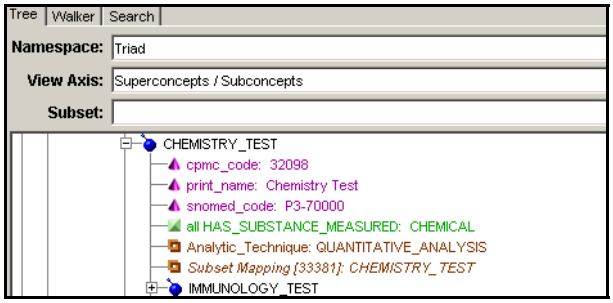
Select **Container View** from the popup menu to list concept attributes within individual, separate "folders."



You can open each "folder" and display the attribute values within.

Inline View

The inline view lists all of the concept attributes that the Container View does, but without the use of “folders.”



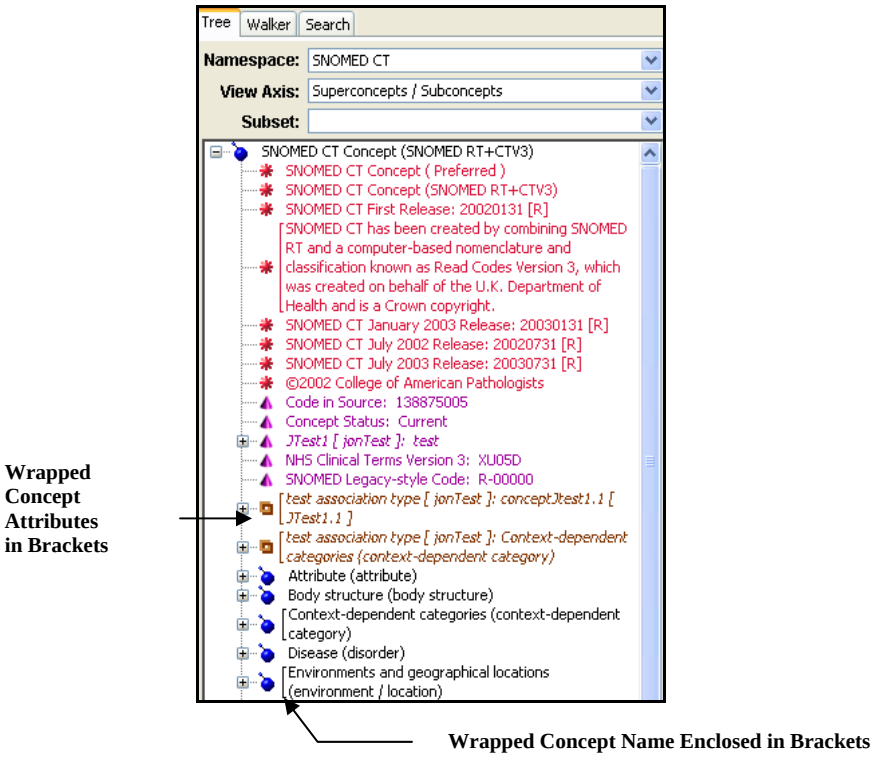
Icons and Colors

The following icons indicate concept or term attributes in the DTS Editor. These icons and colors are defined in advance for you (you cannot modify them).

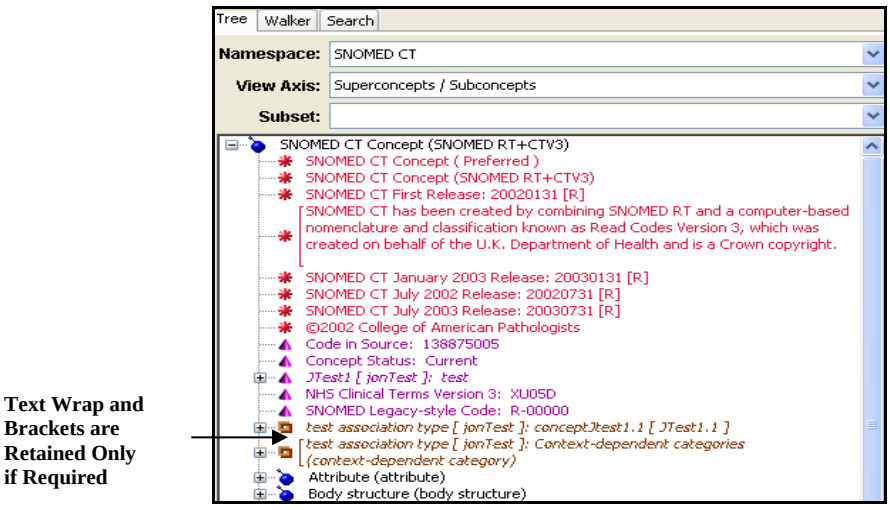
Symbol/ color	Description
	Indicates a concept in the *Concept/Term* Details panel.
	Indicates a term in the *Concept/Term Details* panel.
	Indicates a concept in the *Concept Tree* panel. In the *Concept/Term Details* panel, indicates a subconcept of the concept displayed in the detailed view.
	In the *Concept/Term Details* panel, indicates a superconcept of the concept displayed in the detailed view.
	In the *Concept Tree* and *Concept/Term Details* panels, indicates a synonym for a concept.
	In the *Concept Tree* and *Concept/Term Details* panels, indicates a property (such as print name, medical code, etc.) for a concept.
	In the *Concept Tree* and *Concept/Term Details* panels, indicates the role that relates one concept to another.
	In the *Concept Tree* panel, indicates the non-editable values **concept Code**, **concept ID**, and **Namespace**.
	In the *Concept Tree* and *Concept/Term Details* panels, indicates an association between one concept and another.
	In the *Concept Tree* and *Concept/Term Details* panels, indicates an association or property qualifier for a concept.
	In the *Concept Tree* panel, indicates that the concept in the detailed view is included in the subset that is listed.

Concept Name and Attribute Text Wrapping

If lengthy concept names and/or attribute text extend beyond the border of the *Concept Tree* panel, the text will wrap around to a new line. The concept name or attribute text also will be enclosed in brackets.



If you enlarge the *Concept Tree* panel, the panel size setting is retained if you disconnect from the DTS Server, then reconnect. During the next session, the text wrapping and brackets will be removed if they are not required in the larger panel.



Click to Edit (Ontylog or Thesaurus Tree)

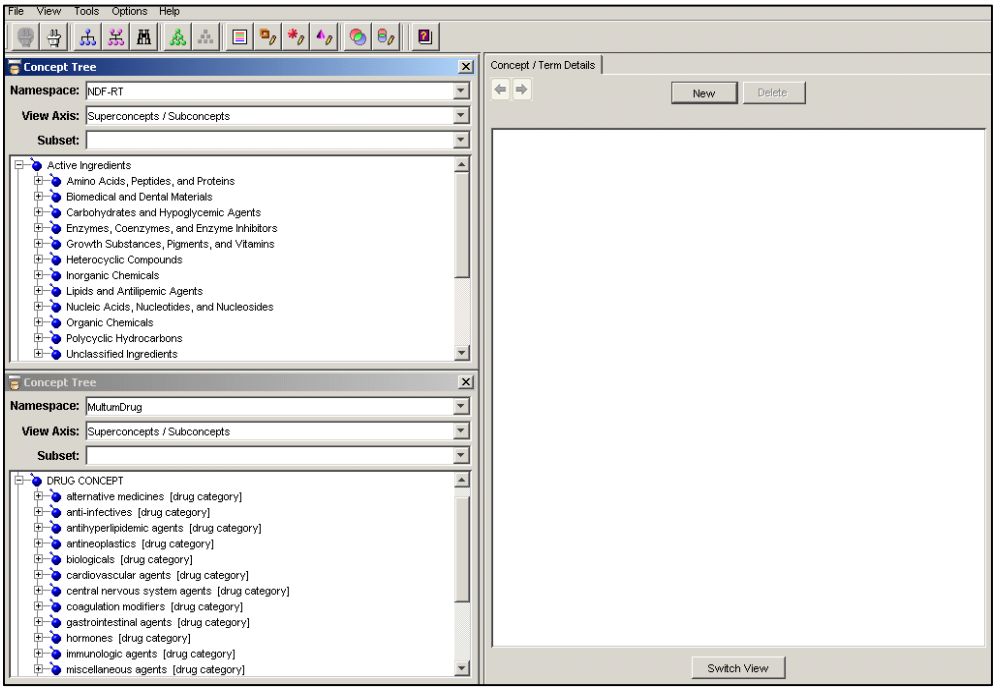
The **Click to Edit** option is available for either an Ontylog or a Thesaurus tree (only **Click to Edit** displays for a Thesaurus tree). If you click **Click to Edit**, any concept you select displays automatically in the *Concept/Term Details* panel. This eliminates the need to drag the selected concept to the *Concept/Term Details* panel for view.

Multiple Panel Instances

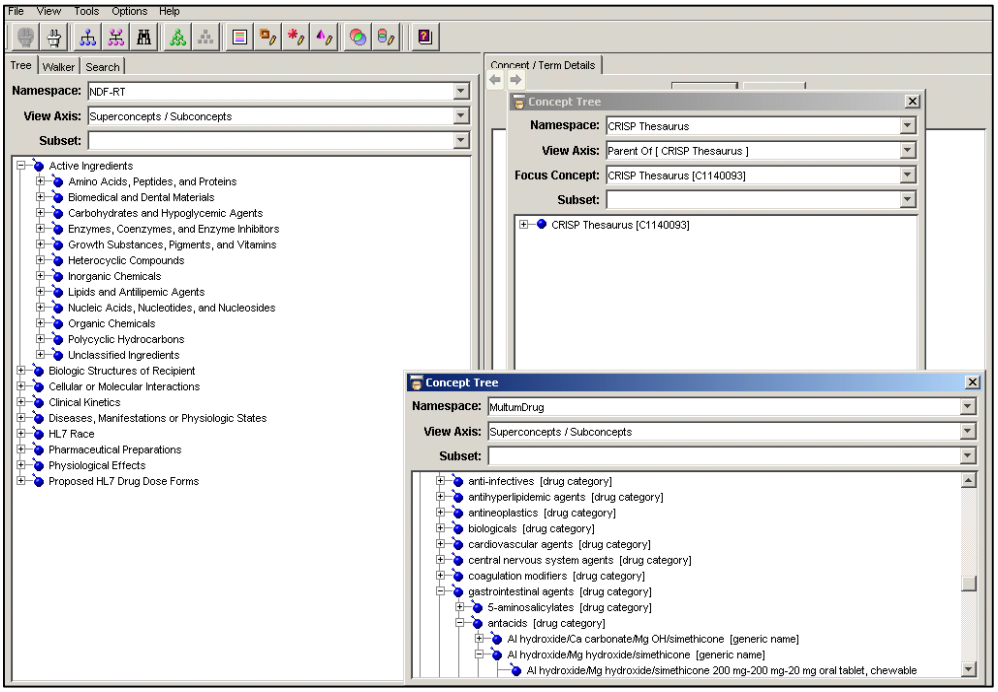
The DTS Editor allows you to open multiple occurrences of the *Concept Tree*, *Concept Walker*, and *Search* panels by selecting these options from the **Tools** menu, by clicking the appropriate tab, or by clicking the corresponding icon in the toolbar. Each instance of the panel displays as a free-floating, sizable window; the size and location of these floating panels are retained for future sessions.

You can view, compare, and drag information from multiple instances of each window. The data in each instance of the window can be from the same namespace, or can reflect data from different namespaces. Drag and drop capability between the DTS Editor windows and panels lets you create associations between namespaces, and view the results immediately on the *Concept Tree* panel (refer to the *Map Concepts or Terms across Namespaces* discussion later in the guide).

In the following illustration, two occurrences of the *Concept Tree* window are open (covering the left panel) each reflecting a different namespace.



In the next illustration, the *Concept Tree* panel displays in the left pane, and multiple *Concept Tree* floating windows display elsewhere on the *DTS Main* window. Note that the active window is sized larger to accommodate the length of the concept names.



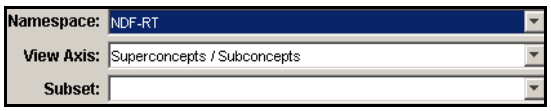
Customize the Tree View

Follow these procedures to select the namespace for which you want to view data. The format of the concept tree display depends in part on the type of namespace you select, **Ontylog** or **Thesaurus**. Based on the view parameters, you configure the tree to display in either a hierarchal format (subconcepts/superconcepts) or an association format that reflects concepts associated with a specific **focus** concept. You can expand and collapse the tree in either format, as needed.

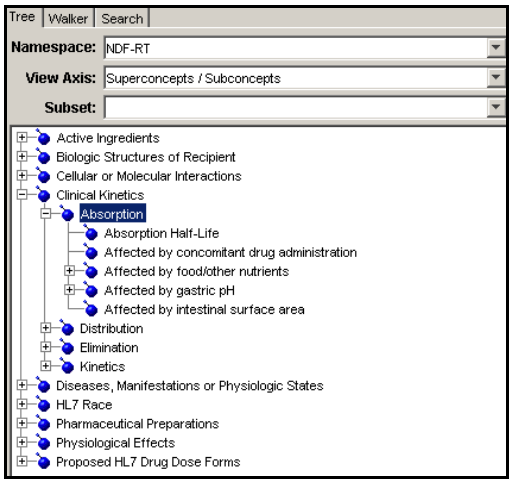
Hierarchy Tree View

Select the namespace for which the concept tree will display from the *Namespace* dropdown field list. Click the dropdown arrow to display all namespaces available for view options.

When you select an Ontylog namespace for view, the default in the *View Axis* dropdown field is **Superconcepts/Subconcepts**, which results in a hierarchal view of the namespace concepts.



To expand a selection to view lower-level nodes, click adjacent the **Expand** button ⊞ . When expanded, the concepts are listed in a hierarchical scheme, or "taxonomy."



In the example, when you expand **Absorption**, five "children" are visible. If there is no **Expand** button adjacent to a concept, it indicates there are no additional subconcepts hidden for the concept. The nodes immediately above a concept are called direct superconcepts (**parents**). Nodes immediately below a concept are called direct subconcepts (**children**).

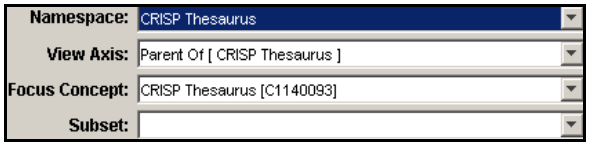
As you expand the tree, you may want to collapse the tree to view only the higher levels of the hierarchy. Click the **collapse** button ⊟ to hide the subconcepts.

Association Tree View

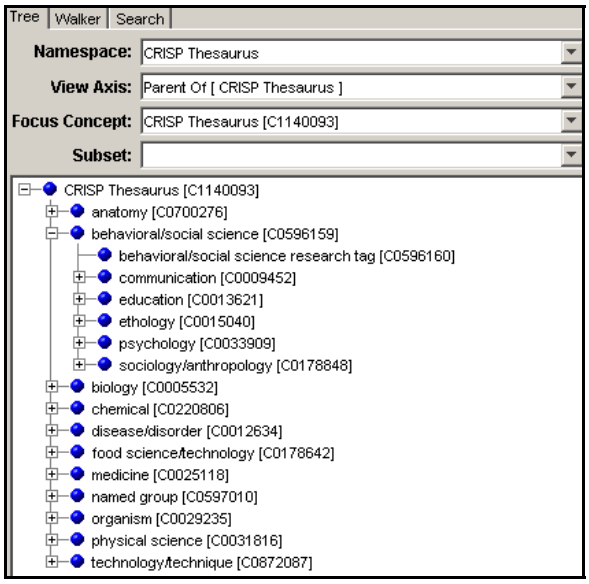
Select the namespace for which the concept tree will display from the *Namespace* dropdown field list. Click the dropdown arrow to display all namespaces available for view options.

When you select an Ontylog namespace for view, the default in the *View Axis* dropdown field is **Superconcepts/Subconcepts**, which results in a hierarchal view of the namespace concepts. If you wish, you can configure a tree view that consists of all concepts for which **associations** are established for a specified concept. An association is a relationship between concepts and/or terms within a namespace, or across namespaces.

The default association type for an association tree configuration is **Parent of**. Note the illustration.



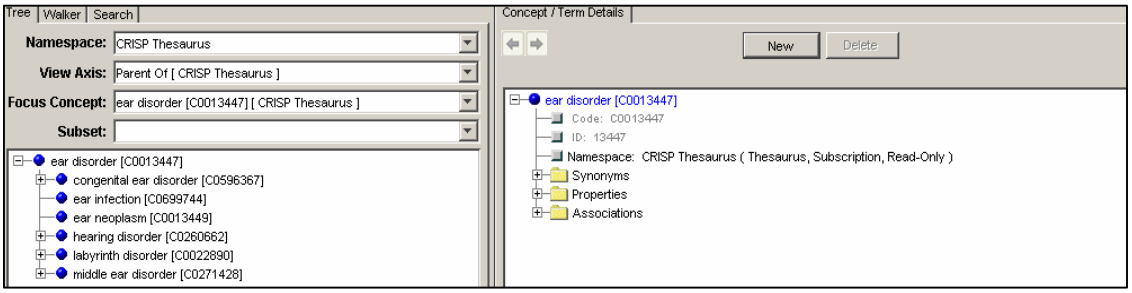
The association tree that displays in the *Concept Tree* panel reflects the default association type.



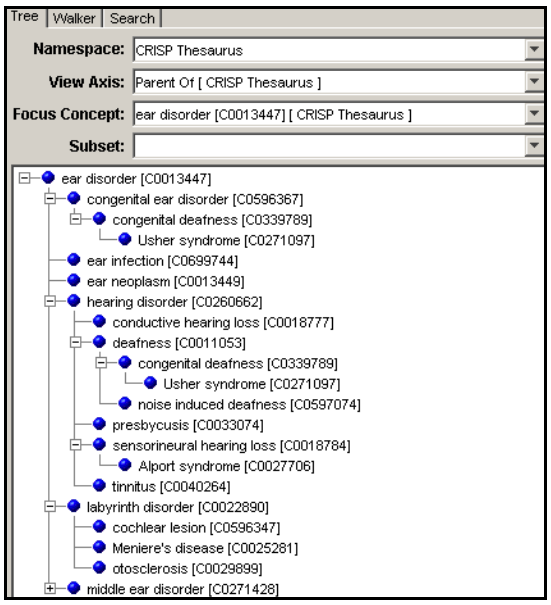
You have the option of selecting another association type on which to base the tree view. Click the arrow on the *View Axis* field to list all existing concept associations in the knowledgebase. Click the desired association to select it; the namespace in which the association was created displays in parentheses.

You also have the option of establishing a **focus concept** in your association tree. The focus concept serves as the **root** concept in your tree view.

Drag a concept from another panel or window (e.g., *Concept /Term Details* panel) and drop it into the *Focus Concept* field. The focus concept sets the starting point (i.e., root, or threshold) for the chain of associations to be displayed.



To view concepts with associations to those listed in the displayed association tree, click the **Expand** button ⊞ next to the desired concept in the tree. Note the illustration.

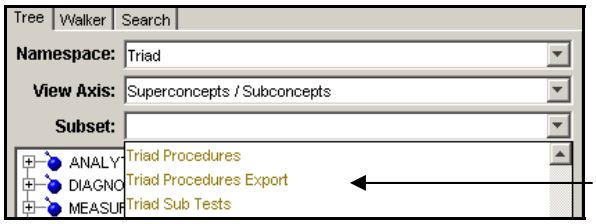


View Concepts in a Selected Namespace Subset

A **subset** is a segment of concepts that you can create from a designated namespace, based on selection criteria that you define. You can create a subset from a subscription or local namespace, or from a (classified) extension namespace.

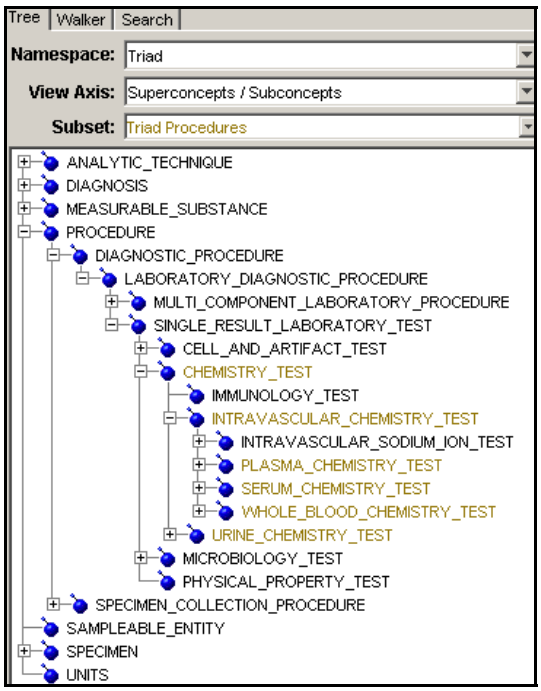
The concepts in each subset can share associated attributes, and each subset may include a few concepts or many concepts. Refer to the *DTS Subset Editor Users Guide* for procedures on subset creation in DTS.

If the namespace in the view has one or more subsets created for it, you can choose to highlight each concept in the *Tree* view that was selected for a subset. The *Subset* field dropdown lists all existing subsets for (only) the namespace in the view; the subsets display in gold color.



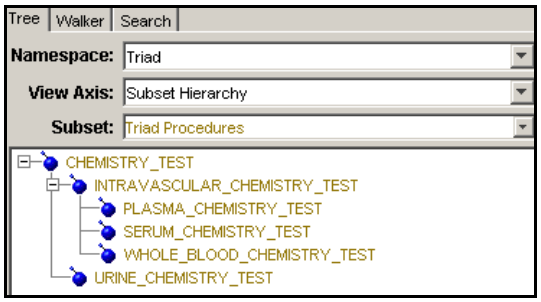
Concepts Included in Subset of the Namespace in Tree View

Click the desired subset in the list. Each namespace concept that is included in that subset is highlighted (in gold color) in the hierarchy tree in the *Concept Tree* panel.



For an Ontylog namespace, you also can view the concept hierarchy within each of its subsets. From the *View Axis* field dropdown list, select **Subset Hierarchy** (**Subset Hierarchy** is enabled as a selection only when a namespace that has existing subsets is in the view). From the *Subset* field dropdown list, select the subset for which you want to view a concept hierarchy.

The hierarchy tree for the **subset** (only) displays, also in gold color.



Click the Expand ⊞ and collapse ⊟ buttons to view and hide subconcepts, as needed.

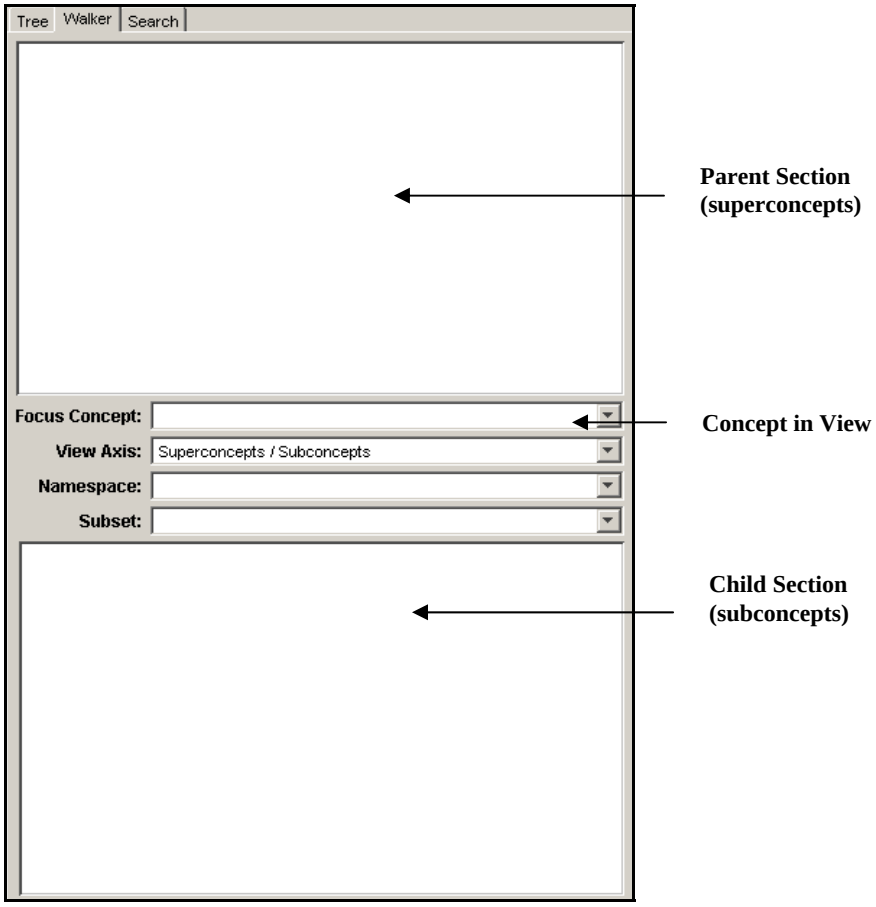
Concept Walker View

The Concept Walker provides a view of a selected concept's place in the Concept Tree, and its relationships with other concepts. You can configure the view to reflect either a hierarchal format (subconcepts/superconcepts) or an association format that reflects concepts associated with a specific **focus** concept.

Hierarchy View

Follow this procedure to display and use the *Concept Walker* panel to provide a view of the selected concept's relationships (i.e., ancestor and descendant concepts).

1. Click the *Walker* tab in the upper-left portion of the *DTS Editor Main* window. The *Concept Walker* panel displays in the left pane.



The dropdown field in the center of the panel (*Focus Concept*) is where you select the concept for which relationships will be listed. If you used the Concept Walker earlier in the current session, previous focus concepts are retained in the *Focus Concept* field pulldown list for your selection.

2. You can drag any concept visible on another window or panel (*Search* panel, *Concept/Term Details* panel, etc.) to the *Focus Concept* field on the *Concept Walker* panel. For example, click the *Search* tab to display the *Search* panel, or click the **Search** icon in the toolbar to display the floating *Search* window; you can position the floating window so that it is adjacent to the *Concept Walker* panel.

   Drag a concept to the *Focus Concept* field. When the field changes to yellow, unclick the mouse to drop the concept.

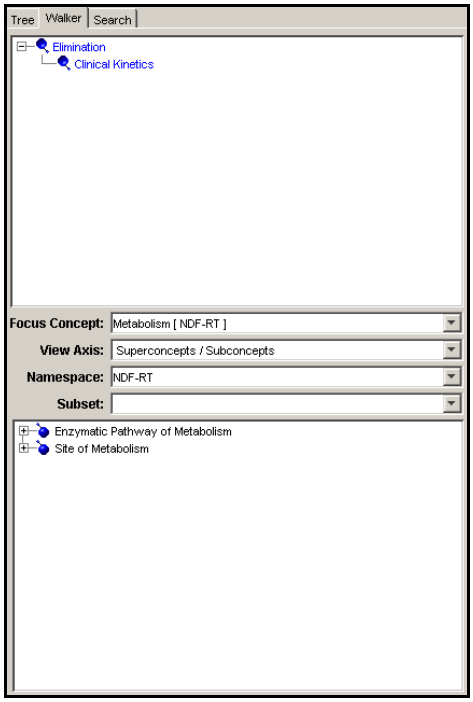
3. When you select a focus concept from an Ontylog namespace for view, the default in the *View Axis* dropdown field is **Superconcepts/Subconcepts**, which results in a hierarchal view of the namespace concepts. Do not modify this field if you want a hierarchal format for the view.

4. If the focus concept you selected is from an Ontylog namespace, the name of that Ontylog namespace displays in the *Namespace* field. If any **Ontylog Extension** namespaces exist for that namespace, these will be listed in the *Namespace* field dropdown list.

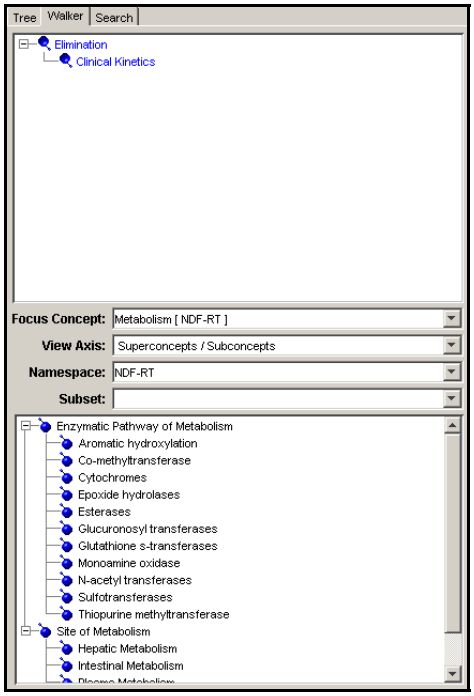
   An Ontylog Extension namespace is an extension of a specifically linked **Ontylog Subscription** namespace. You create an Ontylog Extension namespace to create and maintain new local content for the linked Ontylog subscription namespace. From the list, select the Ontylog Extension namespace for which you want to display a hierarchy view. Refer to the *Concept Walker View and Ontylog Extension Namespaces* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on using the Concept Walker with Ontylog Extension namespaces.

5. If your *Focus Concept* has one or more parents, these display in the **Parent** section above the *Focus Concept* dropdown field. The section below the *Focus Concept* dropdown field displays the subconcepts, or children, of the concept.

6. In the **Parents** section, you can expand any visible ancestor concept to list its parent concepts. Click the **Expand** button ⊞. Higher-level concepts are listed in inverse order to their place in the hierarchy tree.



7. In the **Subconcepts** section, click the **Expand** button ⊞ to expand the hierarchy and list children for any visible descendant of the concept you selected. The focus concept is the root for this part of the view.



Association View

You can configure a Concept Walker view that consists of all concepts for which **associations** are established for a specified concept. Each association is a relationship between concepts and/or terms within a namespace, or across namespaces.

Follow this procedure to display and use the *Concept Walker* panel to provide a view of associations for the selected concept.

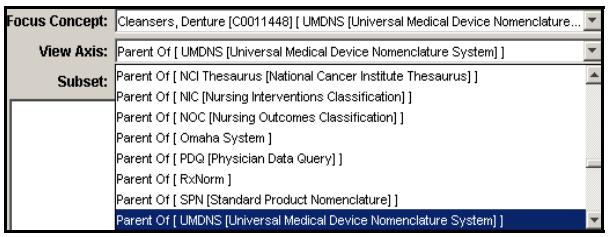
1. Click the *Walker* tab in the upper-left portion of the *DTS Editor Main* window. The *Concept Walker* panel displays in the left pane.

   The dropdown field in the center of the panel (*Focus Concept*) is where you select the concept for which relationships will be listed. If you used the Concept Walker earlier in the current session, previous focus concepts are retained in the *Focus Concept* field pulldown list for your selection.

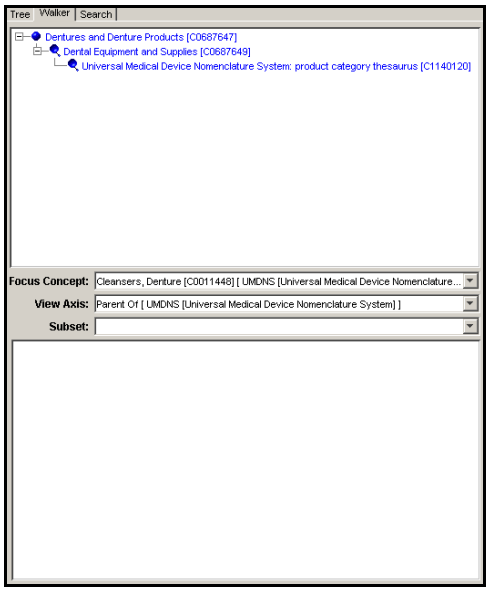
2. You can drag any concept visible on another window or panel (*Search* panel, *Concept/Term Details* panel, etc.) to the *Focus Concept* field on the *Concept Walker* panel. For example, click the *Search* tab to display the *Search* panel, or click the **Search** icon in the toolbar to display the floating *Search* window; you can position the floating window so that it is adjacent to the *Concept Walker* panel.

3. Drag a concept to the *Focus Concept* field. When the field changes to yellow, unclick the mouse to drop the concept. The focus concept will serve as the **root** concept in your association view.

4. When you select a focus concept from an Ontylog namespace for view, the default in the *View Axis* dropdown field is **Superconcepts/Subconcepts**, which results in a hierarchal view of namespace concepts. Click the arrow on the *View Axis* field to list all existing concept associations within all the namespaces in your knowledgebase.



   Click the desired association to select it (the namespace in which the association was created displays in parentheses). The concept(s) for which there are associations with the *Focus Concept* are listed in the *Concept Walker* panel. In the following illustration for the focus concept **Cleansers, Dentures**, the concepts associated through the association **Parent Of** are listed.

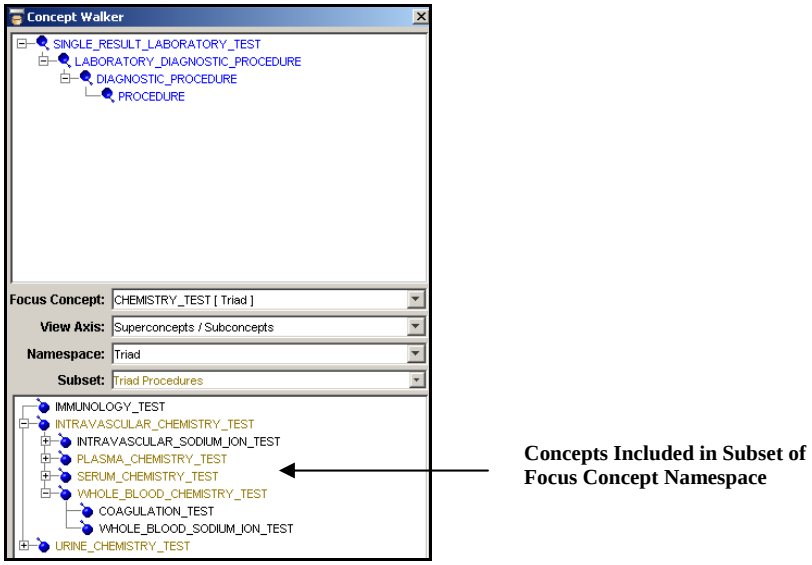


You can drag the returned concept to the *Concept/Term Details* panel to view attribute details.

View Subset Concepts in the Concept Walker

If the *Focus Concept* field concept is from a subscription, local, or (classified) extension namespace for which a subset exists, you can choose to highlight in the displayed hierarchy those concepts within that subset. From the *Subset* field dropdown (which lists all subsets for the *Focus Concept* namespace field, in gold text) select the desired subset.

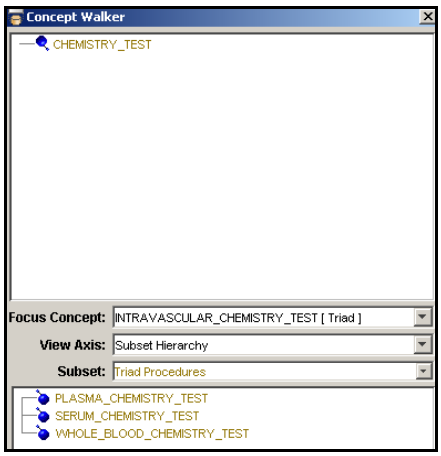
The *Namespace* field reflects the namespace from which the subset concepts were derived. Each concept from the focus concept *Namespace* that is listed in the **Parents** and **Subconcepts** hierarchies is highlighted (in gold color).



If the focus concept is from an Ontylog namespace, you also can view a select portion of the concept hierarchy for each of the Ontylog namespace's subsets. From the *View Axis* field dropdown list, select **Subset Hierarchy** (**Subset Hierarchy** is enabled as a selection only when the concept in the *Focus Concept* field is from a subset namespace).

From the *Subset* field dropdown list, select the subset for which you want to view a portion of the concept hierarchy.

The hierarchy tree for the **subset** (only) displays, also in gold color.

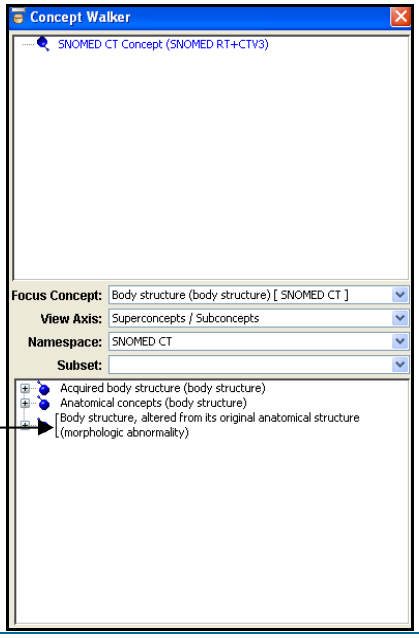


Click the Expand ⊞ and collapse ⊟ buttons to view and hide subconcepts, as needed.

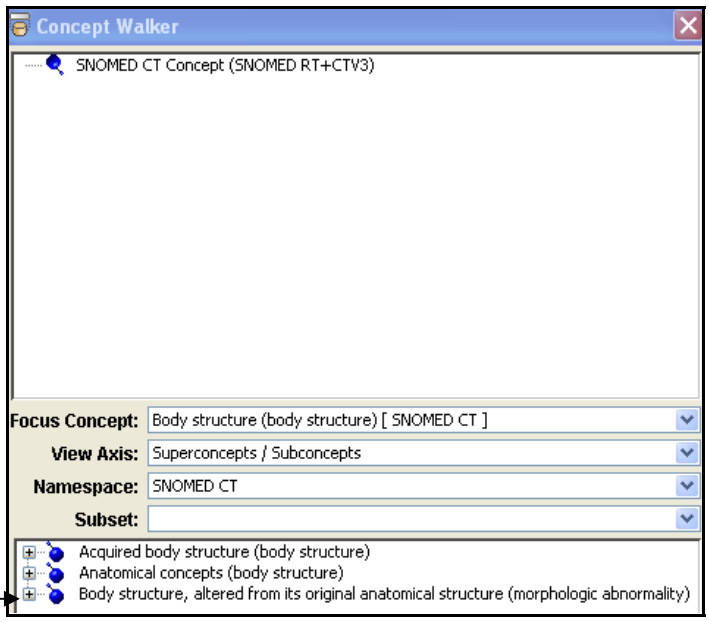
Concept Name and Attribute Text Wrapping

If a lengthy concept name text extends beyond the border of the *Concept Walker* panel, the text display in the Parent and Child sections will wrap around to a new line. The concept name text also will be enclosed in brackets.

Wrapped Concept Name Enclosed in Brackets



If you enlarge the *Concept Walker* panel, then drag a different concept into the *Focus Concept* field, any text wrapping and brackets will be removed if they are not required in the larger panel.



Text Wrap and Brackets are Retained Only if Required

Concept Search

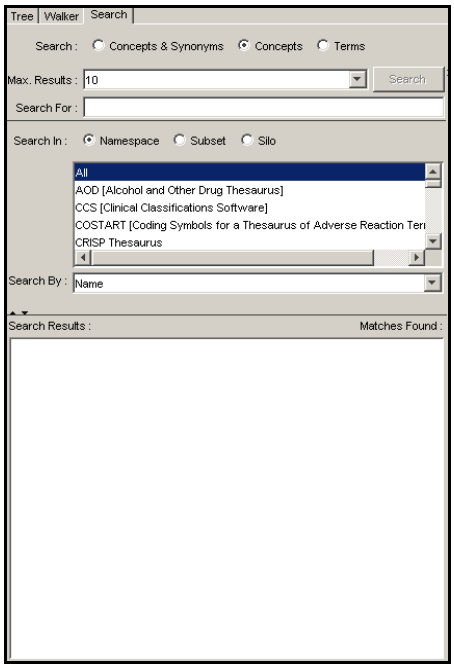
Use the DTS Editor *Search* tab panel search features to search a selected namespace, or all namespaces, and retrieve specific concepts, concept terms, or concepts and synonyms that match the search criteria you specify. You then can drag and drop any retrieved concept/term into another view panel (e.g., *Concept/Term Details*) for further review, or onto one of the Editor windows (e.g., *Synonym Editor*, *Property Editor*). You can display the *Search* panel as a floating window; this option is available from the toolbar on the *DTS Editor Main* window menu bar, as well as from the **Tools** menu (**Tools>Search**).

Search a selected namespace, all namespaces, or a selected namespace subset based on any of the following criteria:

- Name
- Synonym
- Property
- Role
- Inverse Role
- Concept Association
- Inverse Concept Association

You also can search within a specific knowledgebase **silo**, choosing the level of "exactness" by which the search in the silo will be conducted.

To display the *Search* panel, click the *Search* tab on the *DTS Editor Main* window.



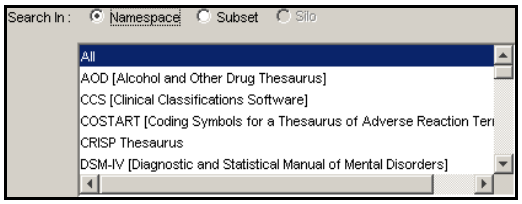
Follow this procedure to search the namespace based on the criteria you specify.

1. Assure that the *Search* tab is selected and the search criteria fields display.
2. To search for both concepts and synonyms that match your search criteria, *Concepts & Synonyms* applies. To search for matching concepts only, click *Concepts*. To search for matching terms only, click *Terms*.
3. From the *Maximum Results* field dropdown list, select the maximum number of concepts and/or terms to be retrieved from the namespace search. You can specify that the search be completed as soon as **10**, **50**, **100**, or **250** concepts and/or terms that match the search criteria have been retrieved (**10** is the default).

   You also can select **Enter a Number**, then specify your own maximum, up to **9999**, in the field that displays. If you anticipate numerous results from the search, you should select **Enter a number**, then specify a large value. Note that if you selected *Concepts & Synonyms* as a *Search* parameter, concept matches will be returned first, followed by synonym matches. If the number of concept matches exceeds the *Maximum Results* limit, no synonym matches are returned.

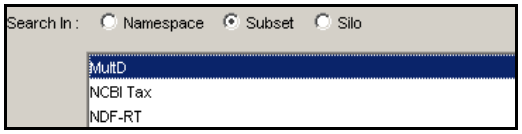
   If you select **Enter a Number**, you **must** specify a number to perform the search.

   Retrieved concepts or terms display in the *Search Results* area in the lower portion of the tab. The total number of matched items retrieved is listed as well. Note that a search with a larger *Maximum Results* number requires a longer period of time to complete.
4. In the *Search For* field, specify the value (i.e., search string) for which you want to search the namespace for a match. Specify the search string value in one of these manners:
   - Enter the specific search string in its entirety (e.g., **abdomen endoscopy**).
   - Broaden the search criteria by entering the asterisk (*) wildcard character. Note these examples when **Name** is the *Search By* parameter:
     - To retrieve all concept/term names containing the string **abdomen**, type ***abdomen*** as the search string in the *Search For* field.
     - To retrieve only concept/term names that begin with the string **abdomen**, type **abdomen*** as the search string in the *Search For* field.
     - To retrieve concept/term names that end with the string **abdomen**, type ***abdomen** as the search string in the *Search For* field.
5. In the **Search In** area of the panel, click the option that reflects where you want to perform the search (*Namespace*, *Subset*, or *Silo*). If you select *Namespace*, the accompanying dropdown lists all namespaces in your DTS knowledgebase.



Click the namespace in which you want to perform the search. The default, **All**, applies if you want to search in all existing namespaces. Note that if you select an Ontylog Extension namespace to search, the results will be from the Extension namespace only (no concepts from the linked Ontylog subscription namespace will be returned). Refer to the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Extension namespaces.

If you select a *Subset* in which to search, the accompanying dropdown lists all subsets that were created for namespaces in your DTS knowledgebase.



Click the subset in which you want to perform the search.

Each **silo** in DTS is a repository of customized concept terminology data acquired from your knowledgebase, and optimized for searching. If you select a *Silo* in which to search, the accompanying dropdown lists all namespace silos that were created in your DTS knowledgebase. Click the desired silo in which you want to perform the search.

6. In the *Search By* field, select the parameter that will be searched in the namespace(s) or subset for the string you specified in the *Search For* field. Only the **Name** option is available on searches for concepts & synonyms, and searches for terms only.

   For concept searches the following options are available:

   - **Name** - This search will retrieve each concept (or each term, if you are performing a term search) with a name that matches the search string parameter you specified in the *Search For* field.
   - **Synonym** - This search will retrieve each concept with a synonym that matches the search string parameter you specified in the *Search For* field.
   - **Property** - This search will retrieve each concept with a property value that matches the search string parameter you specified in the *Search For* field, for the property or properties you select.

If you select **Property** as the search parameter, a list of current knowledgebase properties displays in the *Search On* list area; you select the properties to be searched from this list.

  - **Word Match -** A more generalized property search, in which you can specify one or more words or numbers as the *Search For* value, and the property must contain ***all*** of those search string words, in any order.

- **Role** - This search will retrieve each concept with a role value (i.e., target concept name) that matches the search string parameter you specified in the *Search For* field, for the role type(s) you select (e.g., **Procedure site**). If you select **Role** as the search parameter, a list of current role types displays in the *Search On* list area; you select the role type(s) to be searched from this list.

- **Inverse Role** - This search will retrieve each concept with an inverse role value that matches the search string parameter you specified in the *Search For* field, for the inverse role type(s) you select (e.g., **Procedure site**). If you select **Inverse Role** as the search parameter, a list of current inverse role type(s) displays in the *Search On* list area; you select the inverse roles to be searched from this list.

- **Concept Association -** This search will retrieve each concept that has an association **target** concept with a name that matches the search string parameter you specified in the *Search For* field, for the association(s) you select (e.g., **Is A Parent Of**). If you select **Concept Association** as the search parameter, a list of current association type(s) displays in the *Search On* list area; you select the association type(s) to be searched from this list.

- **Inverse Concept Association -** This search will retrieve each concept that has an inverse association **from** concept with a name that matches the search string parameter you specified in the *Search For* field, for the inverse association(s) you select (e.g., **Is A Parent Of**). If you select **Inverse Concept Association** as the search parameter, a list of current inverse association types displays in the *Search On* list area; you select inverse association type(s) to be searched from this list.

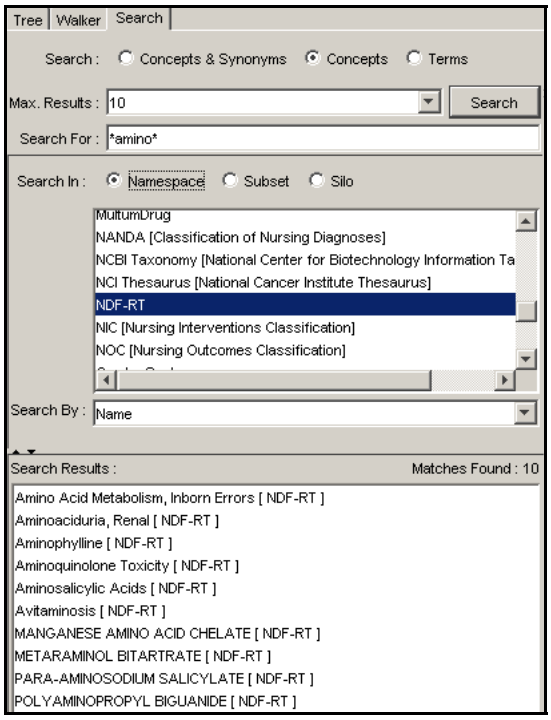
7. After you specify all search criteria, click **Search**. The retrieved concepts and/or terms are listed in the *Search Results* area in the lower portion of the tab. The total number of retrieved matched concepts or terms is indicated as well (**Matches Found:**). When you find the desired concept(s), you can drag the concept(s) to the *Concept Walker* or *Concept/Term Details* panel to view details.

   Note that after you click **Search** to begin the search, the button changes to **Cancel**; to terminate a long-running search, click **Cancel** and enter alternate search criteria. The button changes back to **Search** when the search is completed.

Search for Concepts or Terms Based On Name

Follow this procedure to search for concepts or terms based on **name**.

1. *Concepts & Synonyms* applies if you want to search for both concepts and synonymous terms. To search for matching concepts only, click *Concepts*. To search for matching terms only, click *Terms*.
2. Specify the name (i.e., search string) of the concept/term for which you are searching in the *Search For* field.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, select **Name** in the *Search By* field as the search parameter for the string you specified in the *Search For* field.
5. Click **Search**. Concept/Term names matching the search string parameter you specified in the *Search For* field display in the *Search Results* area in the lower portion of the panel. Note the matched concepts retrieved from a namespace search for the concept name search string ***amino***; each returned concept references the namespace from which it was retrieved.



Search for Concepts With Selected Synonyms

Follow this procedure to search for concepts that have one or more selected **synonyms** that match the search string.

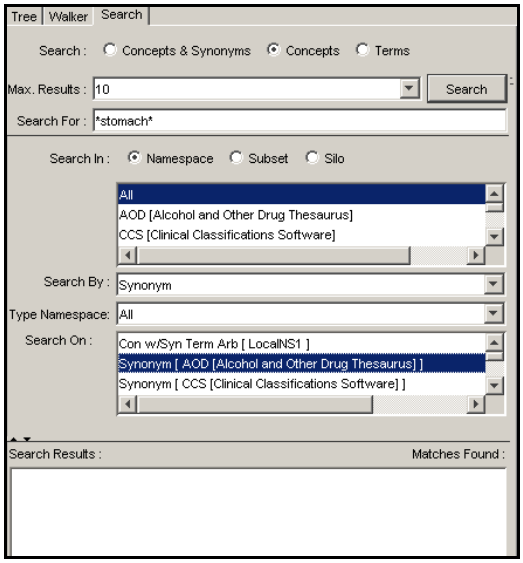
1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the synonym search string.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Synonym** as the search parameter for the string you specified in the *Search For* field. A list of current association types (each representing an association between a concept and a synonymous term) displays in the *Search On* list area.

   Concepts with synonyms that match the search string you entered will be returned, provided the returned terms also meet the other search parameters you specify. A synonym is a term associated with a concept by an association type that represents a concept-to-term association; a synonym always is defined between a concept and a term (however, two terms can be synonyms of the same concept).
5. The *Type Namespace* field displays if you selected **Synonym** as the search parameter in the *Search By* field. The default is to search **All** namespaces for synonyms that match the other search criteria. The *Type Namespace* field gives you the option of filtering the synonym search further.

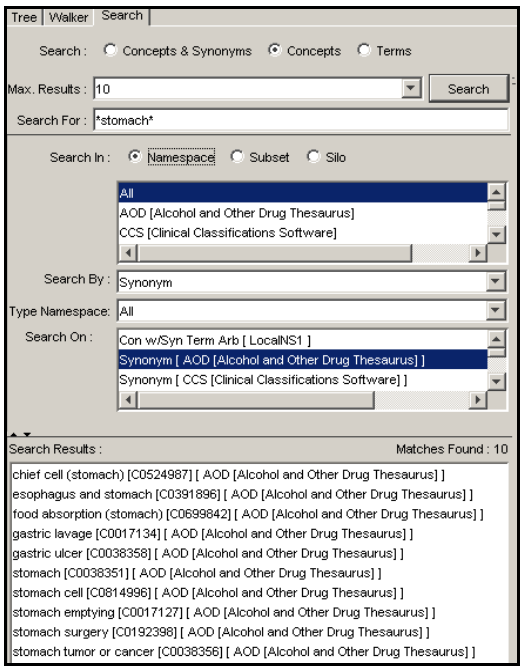
   You can restrict returned results to those synonyms for which associations (concept to term type) were established with the search string term. From the *Type Namespace* field dropdown list, select the namespace in which the synonym association must exist in order to be included in the search results.
6. From the *Search On* field list, select one or more concept-to-synonymous term association types for which to conduct the search.

   - To select two or more nonadjacent association types, click the name of one association type, then hold down **Ctrl** and click the name of each additional association type. Each association type you select is highlighted.
   - To select adjacent association types, click the name of the first association type in the list, then hold down **Shift** and click the name of the last association type in the list. All the association types between the first and last are highlighted.

For the selected concept-to-synonymous term association types, only concepts with synonyms that match the specified search string will be matched and retrieved. In the illustration, the search string ***stomach*** was specified.



7. Click **Search**. Concepts with the selected association types with synonymous term name values that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel. Note the matched concepts retrieved when the selected association type in the specified namespace is **Synonym**, and the search string is ***stomach***. Each returned concept references the namespace from which it was retrieved.



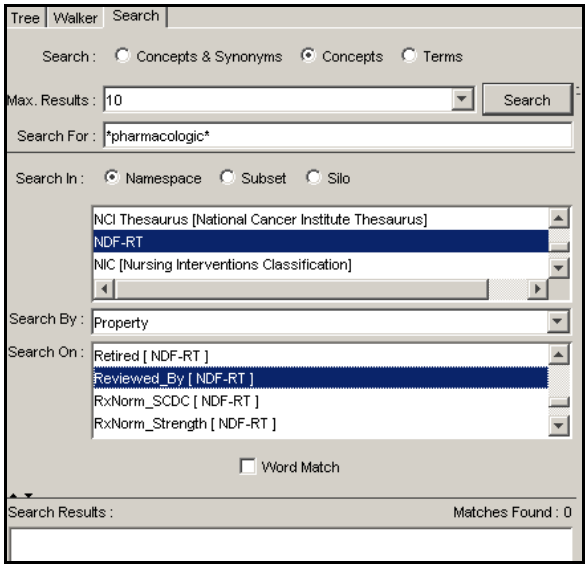
Search for Concepts With Selected Properties

Follow this procedure to search for concepts that have one or more selected properties with values that match the search string.

1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the property search string.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Property** as the search parameter for the string you specified in the *Search For* field. A list of current property types displays in the *Search On* list area.
5. From the *Search On* field list, select one or more property types for which to conduct the search.

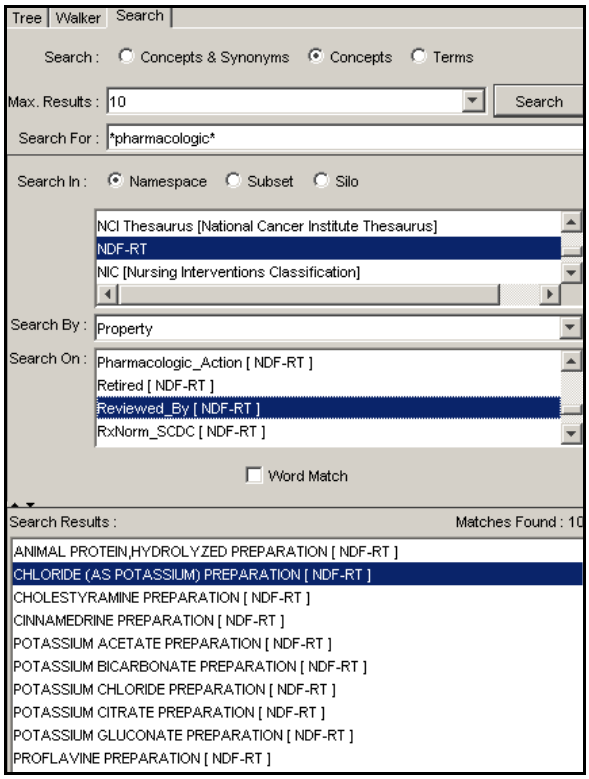
   - To select two or more nonadjacent property types, click the name of one property type, then hold down **Ctrl** and click the name of each additional property type. Each property type you select is highlighted.
   - To select adjacent property types, click the name of the first property type in the list, then hold down **Shift** and click the name of the last property type in the list. All the property types between the first and last are highlighted.

   For the selected property types, only concepts with property values that match the search string you specified will be matched and retrieved from the search. In the illustration, the property type **Reviewed By [NDF-RT]** was selected.



6. Click **Search**. Concepts with the selected property type(s), with values that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel.

   Note the matched concepts retrieved when the selected property type is **Reviewed By [NDF-RT]**, and the search string is ***pharmacologic***; each returned concept references the namespace from which it was retrieved.



Search for Concepts Using the Word Match Feature

The word match search feature works in conjunction with the property search. It allows you to search for a concept based on property when you may not know the property's exact (search string) value. If you specify as the search string those words you believe apply to the property value, the DTS Editor search will retrieve all concepts that contain those words, in any arrangement, as part of the selected property type(s).

The word match search restricts the search to only those concepts with property types that have the **CONTAINS INDEX** column marked **T** (true) in the **setContains.sql** file (***DTSInstall*\ scripts\Oracle**). Refer to the *Configure Word Match Search* discussion in the *Knowledgebase Administrators Guide* for configuration instructions – note that the Knowledgebase Administrator must run the **Knowledgebase Admin** utility in order for the word match search feature to be implemented.

Follow this procedure to search for concepts using the word match feature:

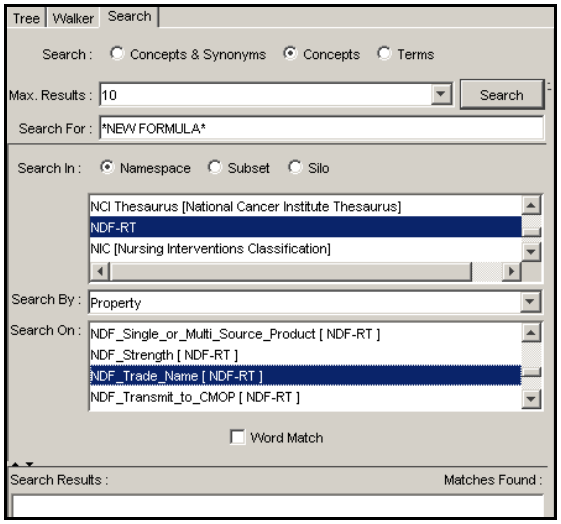
1. Specify the search string in the *Search For* field. For the property word match search, you can specify two or more words. The search results will be those concepts for which ***all*** of the specified search string words are included in the property value (in any order) for the selected property types.

   Note: When doing a word match search, you cannot perform a "search all" wildcard search (i.e., you cannot enter a "*****" in the *Search For* field). There must be at least one other letter on which to base the word match search.

2. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.

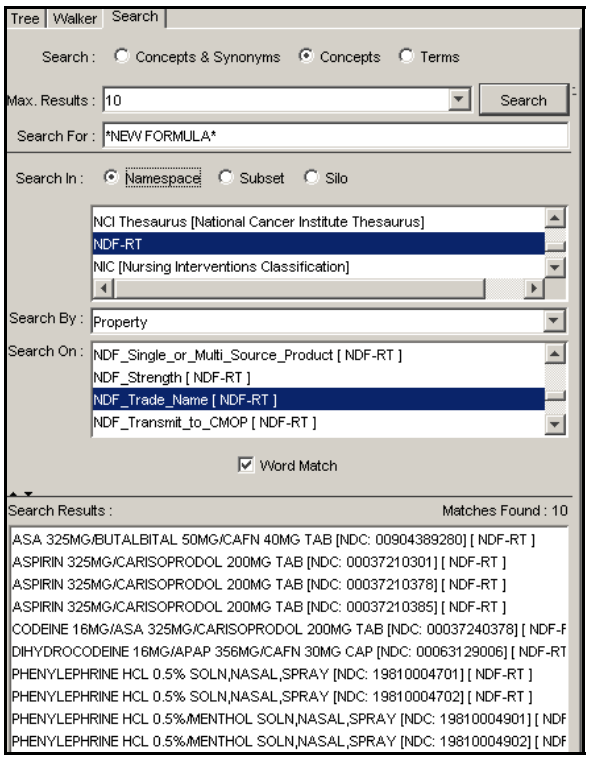
3. For namespace and subset searches, in the *Search By* field select **Property** as the search parameter for the string you specified in the *Search For* field. A list of current property types displays in the *Search On* list area.

4. From the *Search On* field list, select one or more property types for which to conduct the search. In the example, property type **NDF_Trade_Name [NDF-RT]** is selected.



5. Click the *Word Match* field checkbox to select the **word match** search parameter.

6. Click **Search**. Concepts with the selected property type(s), with values that contain the specified search string words (**in any order**) specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel. Note the matched concepts retrieved when the word match option is selected, the selected property type is **NDF_Trade_Name [NDF-RT]**, and the search string is ***NEW FORMULA***; each returned concept references the namespace from which it was retrieved.



Only the concepts for which the selected property type (**NDF_Trade_Name [NDF-RT]**) value includes *both* the words **NEW** *and* **FORMULA** were retrieved.

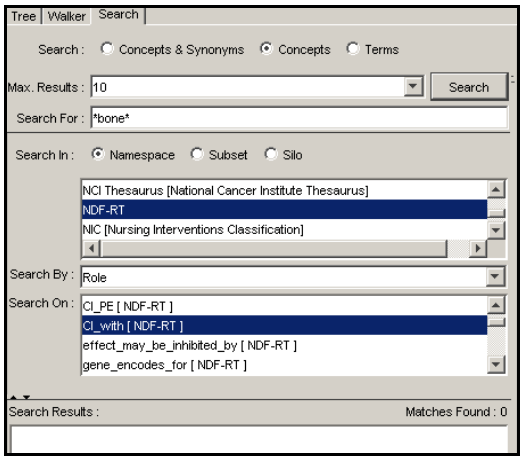
Search For Concepts With Selected Roles

Follow this procedure to search for concepts that have one or more selected role types.

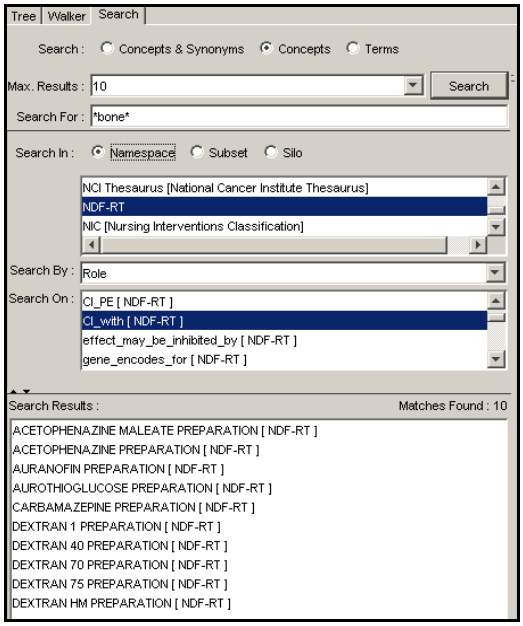
1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the search string for concept role values.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Role** as the search parameter for the role type value string parameter you specified in the *Search For* field. A list of current role types displays in the *Search On* list area.
5. From the *Search On* field list, select one or more role types for which to conduct the search.
    - To select two or more nonadjacent role types, click the name of one role type, then hold down **Ctrl** and click the name of each additional role type. Each role type you select is highlighted.

- To select adjacent role types, click the name of the first role type in the list, then hold down **Shift** and click the name of the last role type in the list. All the role types between the first and last are highlighted.

Only concepts with role type values that contain the search string you specified, for the selected role types, will be matched and retrieved from the search. In the example, the role type **CI_with [NDF-RT]** was selected.



6. Click **Search**. Concepts that have the selected role type, with values that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel. Note the matched concepts retrieved when the selected role type is **CI_with [NDF-RT]**, and the search string is ***bone***; each returned concept references the namespace from which it was retrieved.



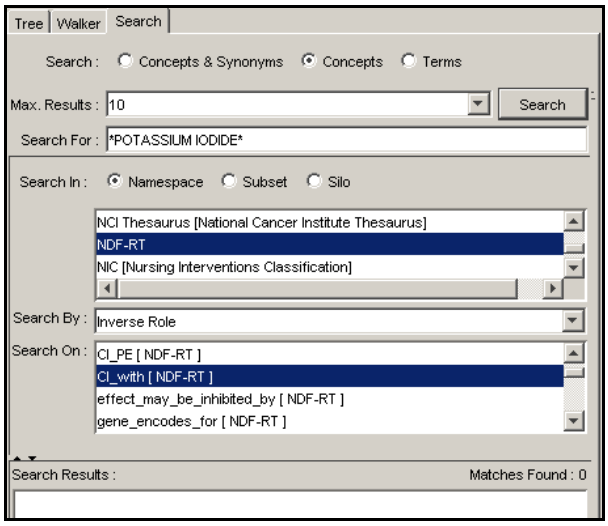
Search for Concepts With Selected Inverse Roles

Follow this procedure to search for concepts that have one or more selected inverse role types.

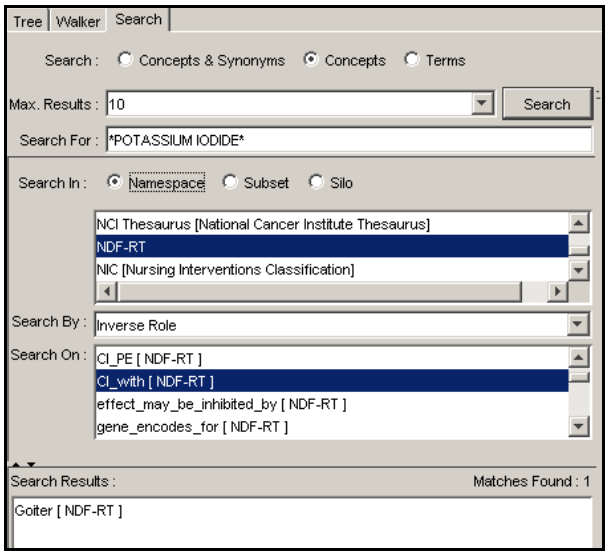
1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the search string for concept inverse role values.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Inverse Role** as the search parameter for the inverse role value string parameter you specified in the *Search For* field. A list of current role types displays in the *Search On* list area.
5. From the *Search On* field list, select one or more role types for which to conduct the search.

    - To select two or more nonadjacent role types, click the name of one role type, then hold down **Ctrl** and click the name of each additional role type. Each role type you select is highlighted.
    - To select adjacent role types, click the name of the first role type in the list, then hold down **Shift** and click the name of the last role type in the list. All the role types between the first and last are highlighted.

    Only concepts with inverse role values that contain the search string you specified, for the selected role types, will be matched and retrieved from the search. In the example, the role type **CI_with [NDF-RT]** was selected.



6. Click **Search**. Concepts that have the selected inverse role type, with values that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel. Note the matched concept retrieved when the selected role type is **CI_with [NDF-RT]**, and the search string is ***POTASSIUM IODIDE***; the returned concept references the namespace from which it was retrieved.



Search for Concepts With Selected Concept Associations

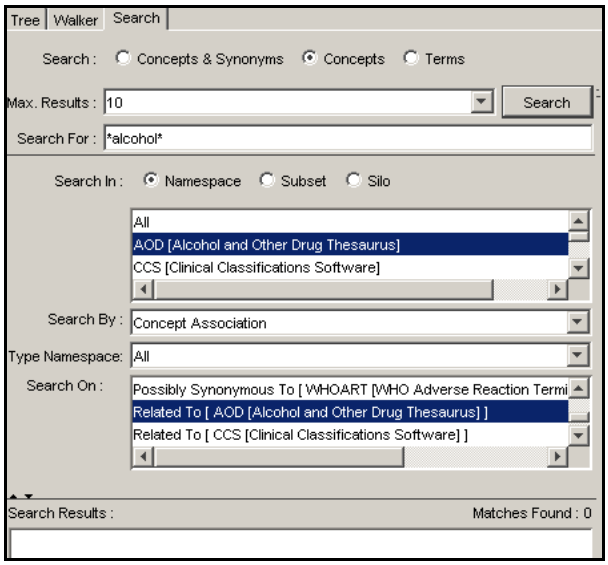
Follow this procedure to search for concepts that have one or more selected associations.

1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the search string for the name of the **target** concept in the concept association.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Concept Association** as the search parameter for the name of the **target** concept in the concept association (i.e., the string you specified in the *Search For* field). A list of current association types displays in the *Search On* list area.
5. The *Type Namespace* field displays if you selected **Concept Association** as the search parameter in the *Search By* field. The default is to search **All** namespaces for association types that match the other search criteria. The *Type Namespace* field gives you the option of filtering the search further. From the *Type Namespace* field dropdown list, select the namespace in which the association type must exist in order to be included as a *Search On* selection option.

6. From the *Search On* field list, select one or more association types for which to conduct the search.

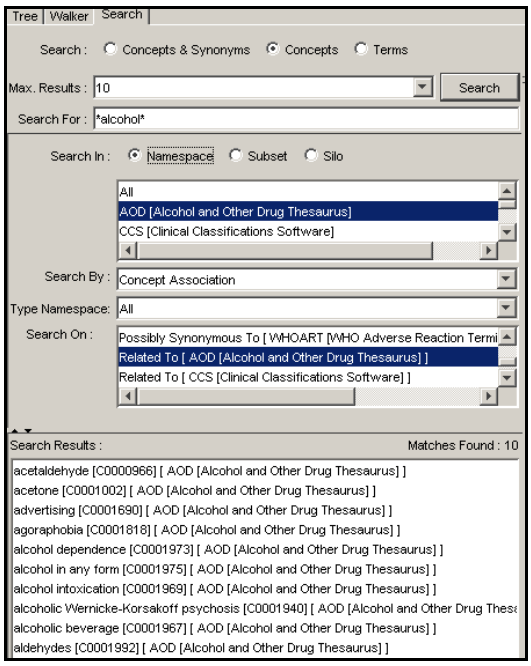
   - To select two or more nonadjacent association types, click the name of one association type, then hold down **Ctrl** and click the name of each additional association type. Each association type you select is highlighted.
   - To select adjacent association types, click the name of the first association type in the list, then hold down **Shift** and click the name of the last association type in the list. All the association types between the first and last are highlighted.

   Only concepts that have concept associations with **target** concept names that contain the search string you specified, for the selected association type(s), will be matched and retrieved from the search. In the example, the association type **Related To [AOD [Alcohol and Other Drug Thesaurus]]** was selected.



7. Click **Search**. Concepts that have the selected association type in the namespace you designated, that have concept associations with **target** concept names that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel.

   Note the matched concepts retrieved when the selected association type is **Related To [AOD [Alcohol and Other Drug Thesaurus]]**, and the search string is ***alcohol***; each returned concept references the namespace from which it was retrieved.



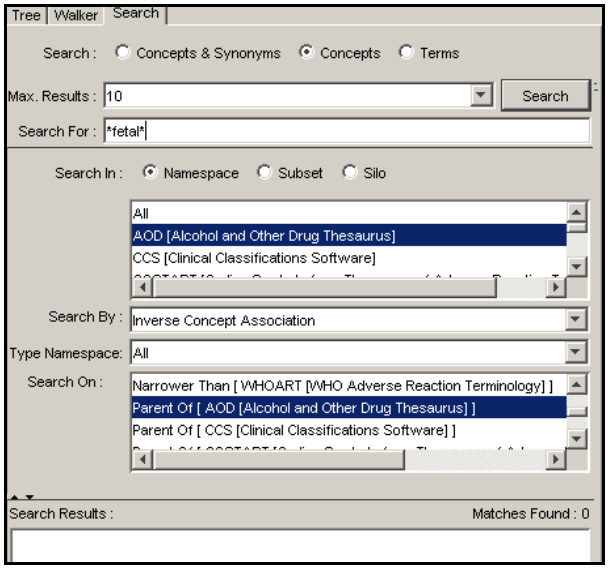
Search for Concepts With Selected Inverse Concept Associations

Follow this procedure to search for concepts with the selected inverse association types.

1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the search string for the name of the **from** concept in the concept association.
3. In the **Search In** area, click the option (*Namespace*, *Subset*, or *Silo*) that indicates where you want to search, then from the accompanying dropdown list, select the specific namespace, subset, or silo to search.
4. For namespace and subset searches, in the *Search By* field select **Inverse Concept Association** as the search parameter for the **from** concept name string specified in the *Search For* field. A list of current association types displays in the *Search On* list area.
5. The *Type Namespace* field displays if you selected **Inverse Concept Association** as the search parameter in the *Search By* field. From the *Type Namespace* field dropdown list, select the namespace in which the association type must exist in order to be included as a *Search On* selection option.
6. From the *Search On* field list, select one or more association types for which to conduct the search.
   - To select two or more nonadjacent association types, click the name of one association type, then hold down **Ctrl** and click the name of each additional association type. Each association type you select is highlighted.

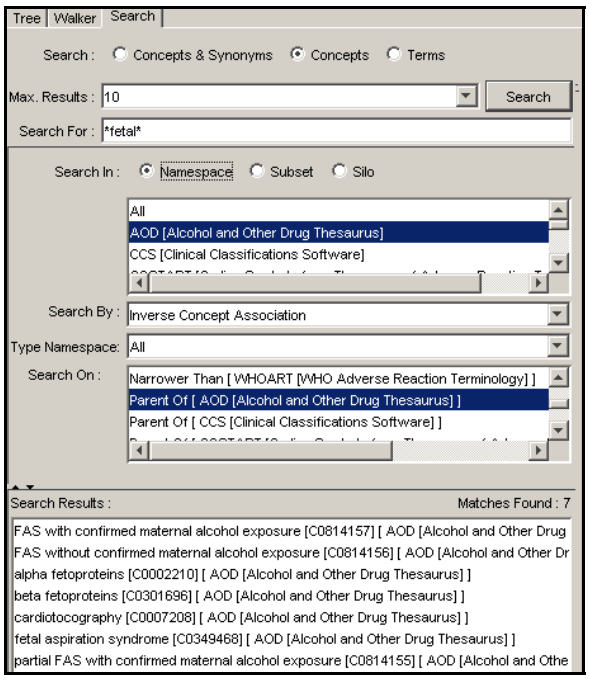
- To select adjacent association types, click the name of the first association type in the list, then hold down **Shift** and click the last association type in the list. All the association types between the first and last are highlighted.

Only concepts that have concept associations with **from** concept names that contain the search string you specified, for the selected association type(s), will be matched and retrieved from the search. In the example, the association type **Parent Of [AOD [Alcohol and Other Drug Thesaurus]]** was selected.



7. Click **Search**. Concepts that have the selected association type, in the namespace you designated, with associations that have **from** concept names that contain the search string you specified in the *Search For* field, display in the *Search Results* area in the lower portion of the panel.

   Note the matched concepts retrieved when the selected association type is **Parent Of [AOD [Alcohol and Other Drug Thesaurus]]**, and the search string is ***fetal***; each returned concept references the namespace from which it was retrieved.



Search for Concepts in a Knowledgebase "Silo"

Follow this procedure to search for concepts that contain the specified search string, and that also reside within a specific knowledgebase **silo**. Each silo is a generated repository of customized concept terminology data acquired from your knowledgebase, and optimized for searching.

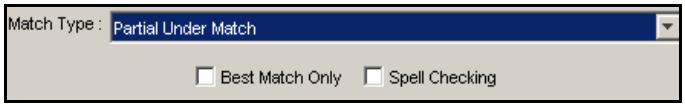
Included with Apelon DTS are the components you can use to generate and populate silos with customized knowledgebase data. Refer to the *DTS Knowledgebase Administrators Guide* for procedures on customizing the silos with data from your knowledgebase.

Follow this procedure to search for concepts within the knowledgebase silo(s) you select.

1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the concept/term search string.
3. In the **Search In** area, select **Silo** to indicate where you want to search for the string you specified in the *Search For* field. If your DTS knowledgebase administrator ran the DTS **Selector & Extractor** utility to create knowledgebase silos, these generated silos are listed. Select the specific database silo in which to search; only the selected silo will be searched for the string you specified.

   Depending on the configuration for populating the silos, each silo may contain data from multiple namespaces, or from a single namespace. Note that the *Namespace* dropdown field is not available when you perform a silo search (this is because the silo configuration determines which namespaces will be searched).

4. At this point you can choose from a series of search features that allow you to specify the level of "exactness" for the search of the selected silo. These are referred to as the **MatchPack** matching options.



The *Match Type* allows you to choose from three increasingly tolerant types of search matching. Matches are attempted in the order shown in the following discussions.

A. **Complete Match**: This is the most exact method of matching the search string that you specify to either a concept name, or the name of one of its synonyms, , in the silo you selected. Complete Match is always active (even if you choose one of the other, more tolerant, matching methods).

- Through Complete Match, a match occurs and a concept is retrieved when either the concept name, or the name of one of its synonyms, in the silo contains the same words as the search string you specify, in any order.
- Every concept in the silo that has a name, or a synonym with a name, that contains all the words in the search string (in any order) is retrieved.

B. **Under Match**: If Under Match is activated, and **Best Match Only** also is active, Complete Match is performed first (i.e., if either a concept name, or the name of one of its synonyms, in the specified silo contains every word in the search string, in any order, a match occurs). If complete matches are found, ***only*** these matches are returned and no further matching attempt is made. If no concept matches occur from the Complete Match, Under Match is attempted. If under matches are found, ***only*** these matches are returned.

- If Under Match is activated, and **Best Match Only** is inactive, under matches will be returned ***in addition to*** the complete matches.
- Through Under Match, a match occurs and a concept is retrieved if either the concept name, or the name of one of its synonyms, in the silo matches the search string words (in any order) ***and the concept term in the silo contains words in addition to those in the search string***.

C. **Partial Under Match**: If Partial Under Match (the default) is activated, and **Best Match Only** also is active, Complete Match is performed first (i.e., if either a concept name, or the name of one of its synonyms, in the specified silo contains every word in the search string, in any order, a match occurs). If complete matches are found, ***only*** these matches are returned and no further matching attempt is made.

- If no matches occur from Complete Match, Under Match is attempted. If under matches are found, ***only*** these matches are returned.

If no matches occur from Under Match, Partial Under Match matches are attempted.

- If Partial Under Match is activated, and **Best Match Only** is inactive, partial under matches are returned ***in addition to*** complete matches and under matches.
- Through Partial Under Match, a match occurs and a concept is retrieved if either the concept name, or the name of one of its synonyms, in the specified silo contains **all remaining words** (in any order) after all **stopwords** have been removed.

  The following stopwords are those words that are considered as unnecessary for the search:

  A
  and
  by
  for
  in
  NOS
  of
  on
  the
  to
  with

- Example: For the search string **attack in the heart and brain**, the string becomes **attack heart brain** because the stopwords **in**, **the**, and **and** are discarded. If the words in the modified search string match either a concept name, or the name of one of its synonyms, in the silo (in any order) a match is returned.

5. The **Spell Checking** option is another of the MatchPack options you can use to search the selected silo. In the event you enter a misspelled search string word, spell checking generates suggested spelling variants against which matches are attempted; concepts matched against these variants then are retrieved. If you click the *Spell Checking* field checkbox, spelling correction will occur when MatchPack attempts to match either a concept name, or the name of a concept synonym, with the search string you specify.

   You can use spell checking regardless of the matching option you select (**Complete Match**, **Under Match**, or **Partial Under Match**). However, the number of matched concepts retrieved from the search is dependent on the matching method you select.

6. Click **Search**. Concepts in the selected silo that meet the search criteria you specified display in the *Search Results* area in the lower portion of the panel.

Search for Concepts in a Namespace Subset

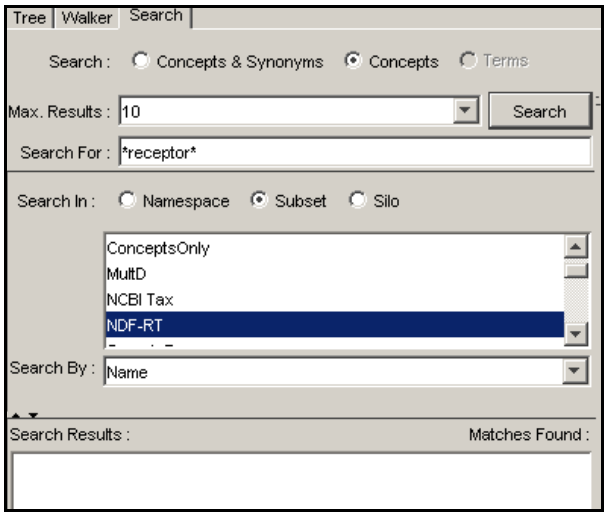
Follow this procedure to search for concepts that contain the specified search string, and that also reside within a specific namespace **subset**. A **subset** is a segment of concepts created from a designated namespace, based on selection criteria that you define. Refer to the *DTS Subset Editor Users Guide* for procedures on subset creation in DTS.

Follow this procedure to search for concepts in the namespace subset you select.

1. Click *Concepts* as your *Search* option.
2. In the *Search For* field, specify the concept/term search string.
3. In the **Search In** area, select **Subset** to indicate where you want to search for the string you specified in the *Search For* field, then from the accompanying dropdown list, select the specific subset in which to search.

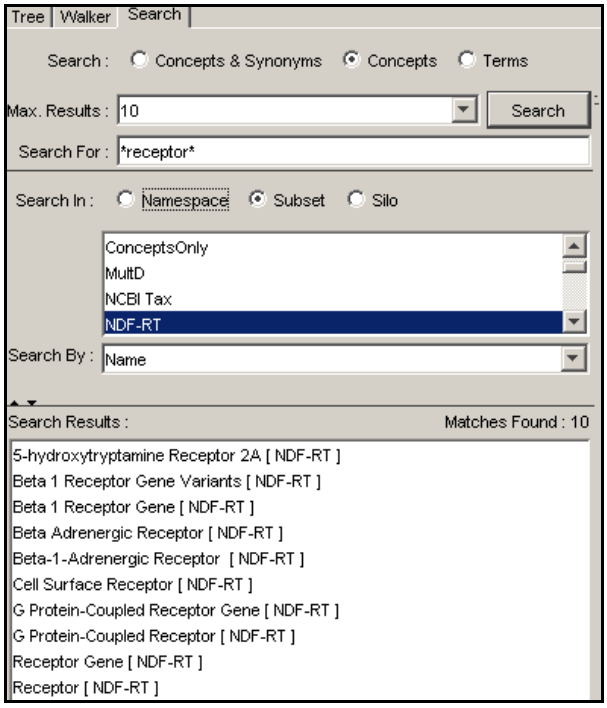
4. In the *Search By* field, select the desired search parameter (e.g., **Role**, **Property**, **Concept Association**, etc.).

   Only concepts in the selected subset that match your search criteria, including the search string you specified, will be retrieved from the search. In the example, the subset **NDF-RT** was selected for a concept **Name** search.



5. Click **Search**. Each concept in the selected subset that has a concept name that includes the search string you specified in the *Search For* field displays in the *Search Results* area in the lower portion of the panel.

Note the matched concepts retrieved from a concept **Name** search when the selected subset is **NDF-RT**, and the search string is ***receptor***; each returned concept references the subset from which it was derived.



Namespace Maintenance

Overview

Each **namespace** in DTS represents an individual source terminology (e.g., **SNOMED**, **ICD-9-CM**). The DTS Editor provides a set of options that allow you to view data in all namespaces, edit namespaces of certain types, and create new, local namespaces.

A namespace **authority** indicates the organization (e.g., U.S. National Library of Medicine, U.S. Medical Terms Review) that approved and/or certified a specific terminology. A namespace authority must be specified as part of each namespace definition. In addition to namespace maintenance, authority maintenance is discussed in this section.

A namespace's **locality** indicates how the namespace data was acquired. A **Subscription** namespace is one for which content was loaded into DTS through a subscription import. A **Local** namespace is one that was created using the DTS Editor, or loaded from TDE using the Knowledgebase Load utility, for the purpose of creating and maintaining local terminology content.

In DTS a namespace is one of four distinct types: **Ontylog**, **Thesaurus**, **Connection**, or **Ontylog Extension**. Each namespace type is described briefly, as well as the level of functionality available in each namespace type using the DTS Editor.

Ontylog Namespaces

Ontylog is a language used to build and maintain large knowledgebases using description logic. Concepts in Ontylog are organized into a taxonomy by a process called **classification**. An Ontylog namespace is one developed using Apelon's Terminology Development Environment (TDE) suite of tools, including the Ontylog Editor.

The DTS Editor provides view capabilities for Ontylog subscription namespaces. In the DTS Editor you can view the concept hierarchy tree in any selected Ontylog terminology namespace. You also can view attribute details (e.g., properties, roles) for any selected concept in the namespace.

You cannot use the DTS Editor to perform edits directly **to** an Ontylog-type **subscription** namespace. However, the DTS Editor allows you to create and maintain new content **for** the Ontylog subscription namespace through two different approaches.

- You can create a new **local**, editable Thesaurus namespace using the DTS Editor
    - Within this local namespace you can add new properties to the Ontylog subscription concepts, create synonyms, create associations, and add qualifiers to properties and associations.

- Because the local content is in a separate namespace, this approach prevents inadvertent overwrite of any new local data (entered using the DTS Editor) if updated TDE content is migrated into the DTS knowledgebase at a later time. Refer to the *Current Local Namespace* discussion later in this section.

- You can create an **Ontylog Extension** namespace
  - As its title implies, each Ontylog Extension namespace is an **extension** of a specific Ontylog subscription namespace, created for the purpose of creating/maintaining new local content for the linked Ontylog subscription namespace.
  - In the Extension namespace you can add new concepts, add or change concept relationships (i.e., superconcept/subconcept relationships) add or change role relationship values, and add new associations for the Ontylog namespace.
  - You can classify the Extension namespace against the linked Ontylog subscription namespace, then view the new hierarchy for the Ontylog Extension namespace; the displayed Extension namespace hierarchy reflects both the linked Ontylog subscription namespace concepts, **and** concepts from the Extension namespace.
  - Refer to the *Create and Maintain Ontylog Extension Namespaces* and *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespaces and classification.

Note: You also can perform maintenance on Ontylog namespaces using the TDE Ontylog Editor tool. Refer to the *Ontylog Editor User Guide*, included with the TDE product, for details on maintaining Ontylog namespace data using that tool.

Thesaurus Namespaces

In DTS a Thesaurus namespace is one that is created as a more localized collection of concepts and terms. For **Thesaurus** namespaces, concepts are organized based on relationships (associations) with other concepts.

Subscription namespaces with the type of **Thesaurus** are not editable in the DTS Editor. However, you can create a new local namespace that is a **Thesaurus** type and create and maintain content locally.

Connection Namespaces

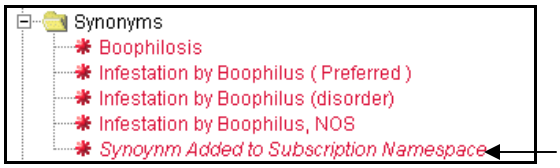
Connection namespaces do not contain any concepts or terms. Rather, they contain associations between concepts or terms in other namespaces.

Current Local Namespace

Select **Set Current Local Namespace** from the **Options** menu to set a current local namespace using the *Set Current Local Namespace* window. The namespace you specify here becomes the default local (writable) namespace for the addition and maintenance of the property types, association types, and qualifier types used during the addition of local content to a subscription namespace.

Thereafter, you can add a new property, synonym, or association to a concept or term in a subscription namespace, as long as the appropriate attribute type (e.g., **property type**) exists in the current local namespace. You have the option of changing the local namespace at a later time.

Attributes added in this manner to a concept or term in a subscription namespace are listed in ***italics*** in the *Concept/Term Details* panel view, as well as in the *Concept Tree* panel view (**Container** and **Inline** versions of the Ontylog Tree view). Note the illustration.



Subscription Content Added to Local Namespace

The attributes themselves actually are written to the *local namespace*; no database updates occur for the *subscription namespace* itself.

You must create at least one local namespace using the DTS Editor. The Editor allows you to select a current, or **working** local namespace in which local content for any subscription namespaces will be stored. You can change the current local namespace at any time; the DTS Editor remembers the local namespace the next time you connect to it. For your reference, the current local namespace always displays in the right-most panel of the **Status Bar** at the bottom of the *DTS Editor Main* window.

For the purpose of adding local content, you will create property types, concept or term association types, and qualifier types in a local namespace. When you add properties to a concept, the property types do not have to reside in the same namespace as the concept, but can be in a local namespace.

Synonymous association types and synonyms also may reside in a local namespace. Qualifier types may reside in the local namespace as well, and do not have to be in the same namespace as the properties or associations they modify.

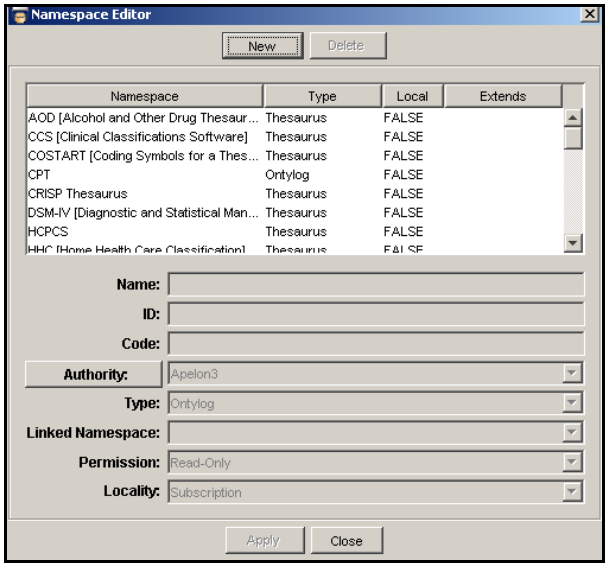
Since the current local namespace may be changed, it is not necessary for local content for a subscription namespace to be stored in a single local namespace. Local concepts and terms may, of course, be created in a local namespace and associated with concepts and terms in the subscription namespace.

Since properties, synonyms, and associations are attached directly to concepts in the subscription namespace, you can retrieve these details along with the existing subscription attributes of the concepts. In the DTS Editor, when you add or modify properties, synonyms, associations, or qualifiers of a subscription concept, the list of types (e.g. property types) will be those defined in the current local namespace, rather than those in the subscription namespace. When you perform a search in the DTS Editor, the list of relevant types offered as search options will be those types defined in the selected subscription or local namespace.

Create a Local Namespace

Follow this procedure to add a new local namespace to your knowledgebase. **Note**: You cannot create a local namespace if you connected to the DTS Editor using a secure socket server connection (the **New** button is disabled). You must connect to the DTS Editor using a JDBC connection or socket server connection in order to add a new namespace. Refer to the *Connect to DTS Editor* discussions for connection procedures.

1. To create a new namespace, select *Namespace* from the *DTS Editor Main* window **Tools** menu. The *Namespace Editor* window displays.



2. Click **New**. The fields in the lower portion of the window are enabled.

3. In the *Name* field, specify the name (i.e., title) of the namespace you are creating. Note that the namespace name should not include double quotes (**"**).

4. In the *ID* field, specify the *ID* for your new local namespace, which can be between zero and 65535. If you specify a number less than **32768**, DTS adds the number 32768 to the *ID* number you specify to create an **internal** namespace ID.

   The calculated *ID* displays for your reference, as well as the ID number you entered (referred to as the **relative ID**). If the calculated ID number is in use already, a message displays to indicate the duplication; enter an alternate ID number.

   You must specify this internal namespace ID if you want to publish this local namespace content for your own subscribers using the **kbcontent-publish** utility. Refer to the *Publish Client's Local Namespace* discussion in the *Knowledgebase Administrators Guide* for local content publishing procedures.

5. Specify a namespace *Code* for additional namespace identification; the code can be formatted however you want.

6. An **authority** indicates the organization (e.g., **U.S. National Library of Medicine**) that approved and/or certified a terminology. From the *Authority* field dropdown list, select the established authority for the new namespace. Refer to the *Authority View and Maintenance* discussions for procedures on viewing and creating authorities.

7. A namespace is one of four types: **Ontylog**, **Thesaurus**, **Connection**, or **Ontylog Extension**. You can create Thesaurus, Connection, or Ontylog Extension namespaces locally and make them read-only or editable. From the *Type* field dropdown list, select the type of terminology (**Thesaurus**, **Connection**, or **Ontylog Extension**) represented in this namespace. Refer to the *Overview* discussions under *Namespace Maintenance* for more on the Thesaurus and Connection namespace types.

   You can create an **Ontylog Extension** namespace as an extension of an **Ontylog subscription** namespace. In the Ontylog Extension namespace you can create new concepts for an Ontylog subscription namespace, then classify the Extension namespace against the linked Ontylog subscription namespace.

   Refer to the *Create and Maintain Ontylog Extension Namespaces* and *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespaces and classification.

8. The *Linked Namespace* field is enabled only if you are creating an Ontylog Extension namespace for an existing Ontylog subscription namespace (i.e., the value in the *Type* field is **Ontylog Extension**). The field is disabled for all namespaces other than those of the Ontylog Extension type. In the *Namespace Editor* window, the linked Ontylog subscription namespace is referenced in the **Extends** column.

   Select the Ontylog subscription namespace for which you are creating the new Extension namespace. In the Extension namespace you can create and edit concepts for the linked Ontylog subscription namespace. You also can classify concepts in the Extension namespace against the content in the Ontylog subscription namespace.

   Refer to the *Create and Maintain Ontylog Extension Namespaces* and *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespaces and classification.

9. The namespace permission indicates whether or not the local namespace is editable. From the *Permission* field dropdown list, select the level of permission (**Read-Only** or **Read-Write**) a user will have in this namespace.

10. The namespace *Locality* indicates how the namespace data was acquired. **Local** is the value for a namespace created using the DTS Editor, or loaded from TDE using the Knowledgebase Load utility, for the purpose of creating and maintaining local terminology content; the field is not editable.

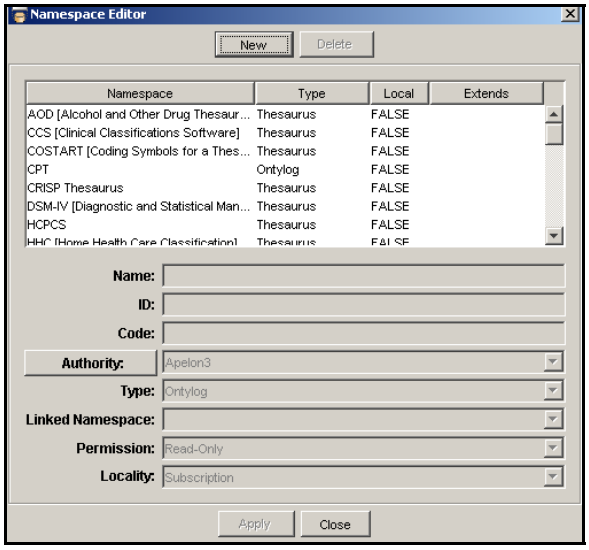
11. Click **Apply** to add the namespace to the knowledgebase. The new namespace is added to the table on the *Namespace Editor* window, which remains displayed; you can click **New** again and create additional local namespaces.

12. When you finish creating, viewing, and editing namespaces, click **Close** to close the *Namespace Editor* window.

View and Edit an Existing Namespace

Follow this procedure to view information for an existing subscription namespace, or local namespace in your knowledgebase. For a local namespace, you can edit the information as necessary. Subscription namespace information is not editable.

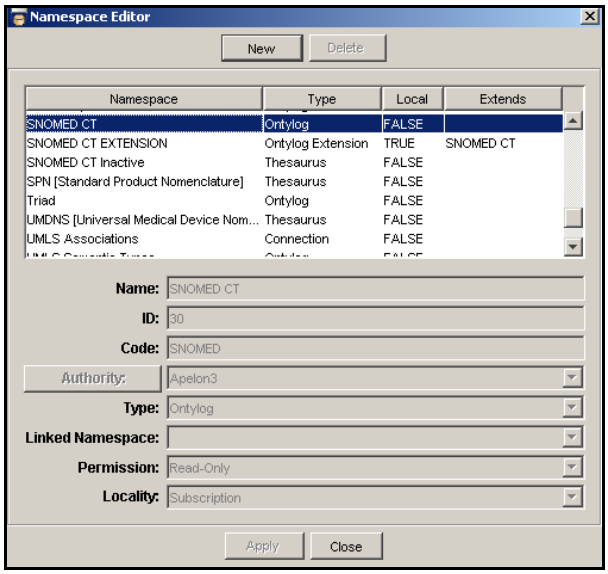
1. To view or edit an existing namespace, select *Namespace* from the *DTS Editor Main* window **Tools** menu. The *Namespace Editor* window displays.



   Information for each existing namespace is listed in a table format. Information includes the namespace name and namespace type (**Ontylog**, **Thesaurus**, **Connection**, **or Ontylog Extension**). An indicator referencing if each namespace is a local namespace (**TRUE**, **FALSE**) is included as well. For each listed Ontylog Extension namespace, the name of the Ontylog subscription namespace to which it is linked is referenced.

   You can resize the table columns. To change the sort for the namespace list, click the column header for the characteristic (**Namespace**, **Type**, **Local**, or **Extends**) on which you want to base the sort.

2. In the table listing, click the namespace you want to view or modify to highlight the row. The data in the bottom portion of the window changes to reflect information from that namespace.



The namespace *Name* displays. This field is editable for a local namespace.

3. The *ID* for an existing namespace is not editable, regardless of whether it is a subscription or local namespace. See the *Create a Local Namespace* discussion for information on assigning a namespace ID to a new local namespace.

4. The *Code* provides additional namespace identification, and can be formatted however you want. The *Code* for an existing namespace is not editable, regardless of whether it is a subscription or local namespace.

5. An **authority** indicates the organization (e.g., **U.S. National Library of Medicine**) that approved and/or certified a terminology. For a local namespace, select an alternate, established authority from the *Authority* field dropdown list. Refer to the *Authority View and Maintenance* discussions for procedures on viewing and creating authorities.

6. A namespace is one of four types: **Ontylog**, **Thesaurus**, **Connection**, or **Ontylog Extension**. Each namespace may be a **subscription** namespace, or a **local** namespace. Refer to the *Overview* discussions under *Namespace Maintenance* for more on namespace types.

   Using the DTS Editor you can create an **Ontylog Extension** namespace as an extension of an Ontylog subscription namespace. In the Extension namespace you can create new concepts for an Ontylog subscription namespace, then classify the Extension namespace against the linked Ontylog subscription namespace.

   Refer to the *Create and Maintain Ontylog Extension Namespaces* and *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespaces and classification.

A **Thesaurus** namespace may be either a subscription namespace or a local namespace. Using the DTS Editor you can create a new local namespace as either a **Thesaurus** or **Connection** namespace. For a local namespace, select the type of terminology represented by this namespace from the *Type* field dropdown list.

7. If you are viewing or editing information for an Ontylog Extension namespace, the value in the *Linked Namespace* field reflects the Ontylog subscription namespace to which it is linked. The field is blank for namespaces other than those of the Ontylog Extension type. In the *Namespace Editor* window, the linked Ontylog subscription namespace is referenced in the **Extends** column.

   Refer to the *Create and Maintain Ontylog Extension Namespaces* and *Classify an Ontylog Extension Namespace* discussions in the *Ontylog Extension Namespaces and Extension Namespace Classification in DTS* document for more on Ontylog Extension namespaces and classification.

8. The namespace *Permission* indicates whether or not the namespace is writable. For a local namespace, select the level of permission (**Read-Only** or **Read-Write**) in this namespace from the *Permission* field dropdown list. Subscription namespaces are **Read-Only**.

9. The namespace *Locality* indicates how the namespace data was acquired. **Subscription** indicates a load of namespace content into DTS through a subscription import. **Local** indicates the namespace was created using the DTS Editor, or loaded from TDE using the Knowledgebase Load utility, for the purpose of creating and/or maintaining local terminology content. This field is not editable for existing namespaces.

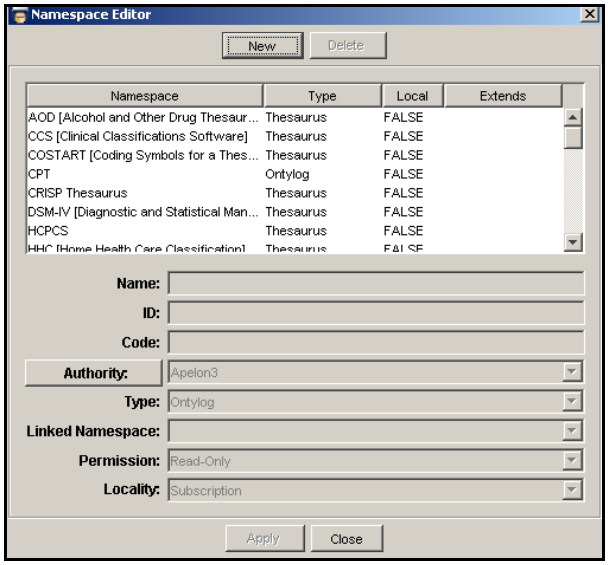
10. Click **Apply** (which becomes enabled if you make an edit) to update any namespace edits. To ignore the edits, click on any other namespace listed in the table to display information specific to that namespace.

11. When you finish viewing/editing namespaces, click **Close** to close the *Namespace Editor* window.

Delete a Local Namespace

Follow this procedure to delete an existing local namespace from your knowledgebase (i.e., one that is ***not*** set as the current local namespace). **Note**: You cannot delete a local namespace if you connected to the DTS Editor using a secure socket server connection (the **Delete** button is disabled). You must connect to the DTS Editor using a JDBC connection or socket server connection in order to delete an existing local namespace. Refer to the *Connect to DTS Editor* discussions for connection procedures.

1. To delete an existing local namespace, select *Namespace* from the *DTS Editor Main* window **Tools** menu. The *Namespace Editor* window displays.

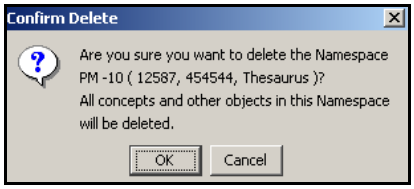


   Information for each existing namespace is listed in a table format. Information includes the namespace name and namespace type (**Ontylog**, **Thesaurus**, **Connection**, or **Ontylog Extension**). An indicator referencing if each namespace is a local namespace (**TRUE**, **FALSE**) is included as well. For each listed Ontylog Extension namespace, the name of the Ontylog subscription namespace to which it is linked is referenced.

   To change the sort for the namespace list, click the column header for the characteristic (**Namespace**, **Type**, **Local**, or **Extends**) on which you want to base the sort.

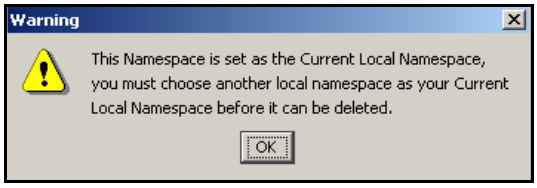
2. In the namespace table listing, click the namespace you want to delete to highlight the row. The data in the bottom portion of the window changes to reflect information from that namespace.

3. The **Delete** option is not available if you selected a subscription namespace. Click the enabled **Delete** button if you selected a local namespace for deletion; a confirmation window similar to the following displays.



4. Click **OK** to delete the namespace from the knowledgebase; the namespace is deleted from the table on the *Namespace Editor* window. All concepts, terms, and associations from the namespace are deleted as well. Click **Cancel** to ignore the deletion.

   The DTS Editor will not permit you to delete the current local namespace. If you select the current local namespace for deletion, a window like the following displays .



   Before you attempt to delete this namespace again, you must set an alternate local namespace. Refer to the *Current Local Namespace* discussion for instructions on setting the local namespace.

5. Click **Close** to close the *Namespace Editor* window.

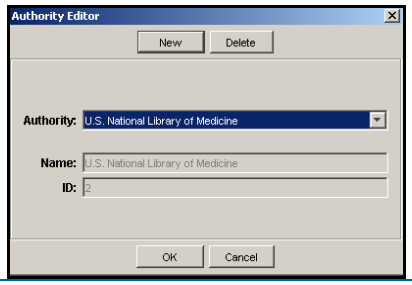
Authority View and Maintenance

A namespace **authority** indicates the organization (e.g., **U.S. National Library of Medicine**, **U.S. Medical Terms Review**) that approved or certified a terminology. A namespace authority must be specified as part of each namespace definition.

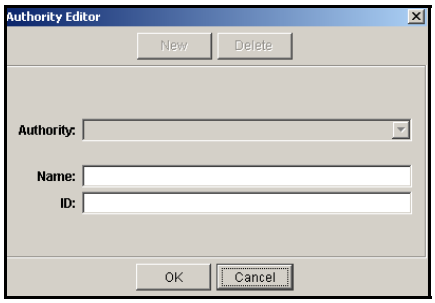
Create an Authority

Follow this procedure to create an authority that you can assign to a local namespace.

1. Click the **Authority** field button on the *Namespace Editor* floating window. The *Authority Editor* window displays.



2. Click **New**. The information for the existing displayed authority is cleared.

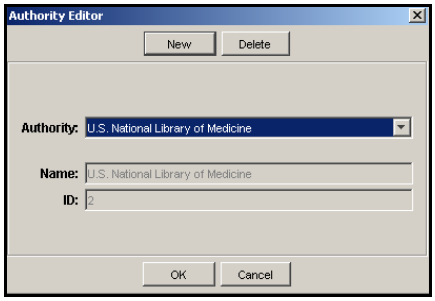


3. Specify the name of the authority for a local namespace in the *Name* field.
4. In the *ID* field specify the ID number of the authority for a local namespace. To avoid using an ID value already reserved for use by Apelon, enter an authority ID number between **1000** and **2000** (inclusive).
5. Click **OK** to update the knowledgebase with the new authority, or click **Cancel** to ignore the addition.

View an Existing Authority for a Local Namespace

Follow this procedure to view information for an existing, local namespace authority.

1. For a local namespace, click the **Authority** field button on the *Namespace Editor* window. The *Authority Editor* window displays.



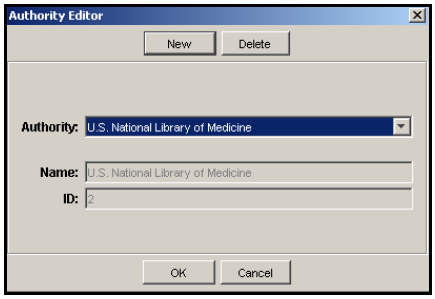
   The information listed is from the first authority in the knowledgebase, listed in alphabetical order.

2. From the *Authority* field dropdown list, select the authority you want to view (the list is alphabetical). The data in the window changes to reflect information from that authority.
3. The title for this *authority* displays in the *Name* field.
4. The identification number assigned to this authority displays in the *ID* field.
5. Click **OK** when you are through viewing authority information, and to close the *Authority Editor* window.

Delete an Authority

Follow this procedure to delete an existing authority. Note that you can delete the authority if it is used by **editable local namespaces only**; you cannot delete the authority if it is used by a subscription namespace, or by a read-only local namespace.

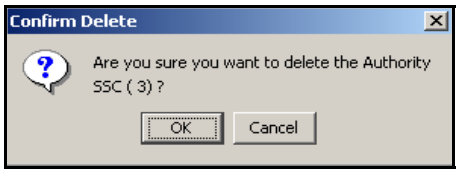
1. Click the **Authority** field button on the *Namespace Editor* window. The *Authority Editor* window displays.



   The information listed is from the first authority in the knowledgebase, listed in alphabetical order.

2. From the *Authority* field dropdown list, select the authority you want to delete. The data in the window changes to reflect information from that authority.

3. Click **Delete**. A confirmation window similar to the following displays.



4. Click **OK** to delete the authority from the knowledgebase. Click **Cancel** to ignore the deletion.

Association Maintenance

This section includes basic procedures for creating and maintaining associations between concepts or terms. An association type (e.g., **Related To**) is assigned to each association between concepts or terms to define the nature of the association. An association may also have a **qualifier**, which provides additional detail regarding the nature of the association (e.g., **Usually**). Procedures for creating and maintaining association types and qualifiers are included as well.

In a **writable** namespace you can create associations between concepts and terms that reside in one namespace (writable or not) or create associations between concepts and terms across namespaces. Refer to the *Create a Concept/Term Association Within a Namespace* and *Map Concepts or Terms Across Namespaces* discussions for examples of these scenarios.

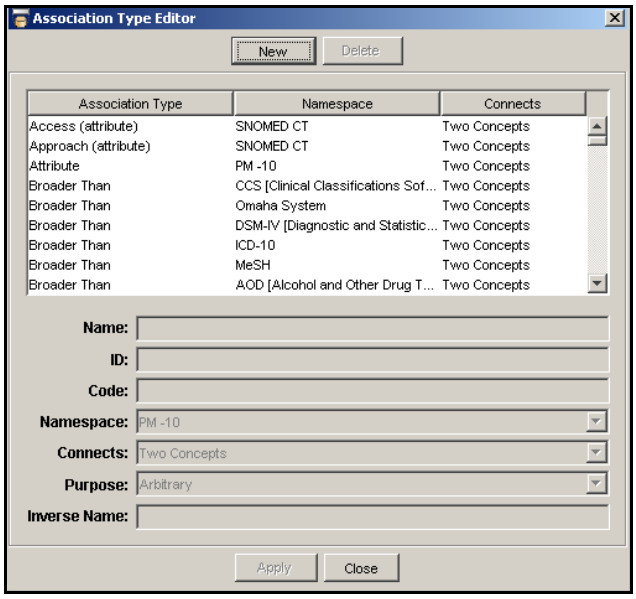
Association Types

Each association you create between two concepts or terms must be assigned a specific type to indicate the nature of the link (e.g., one concept is **Broader Than** the other, or is a **Parent** of the other). The following procedures pertain to creating and maintaining association types.

Create Association Types

Follow this procedure to add one or more new association types to an editable namespace.

1. Select **Association Types** from the **Tools** menu. The *Association Type Editor* window displays.



Information for each existing association type is listed in a table format. Information includes the association type name, the namespace in which the association was created, and an indicator that references if the association type is for a connection between **Two Concepts**, between a concept and a synonym (**Concept With Synonymous Term**) or between **Two Terms**.

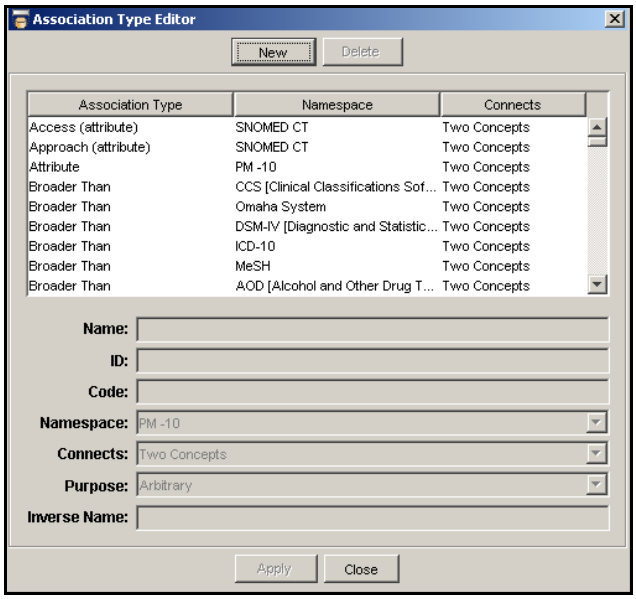
To change the sort for the association type list, click the column header for the characteristic (**Association Type**, **Namespace**, or **Connects**) on which you want to base the sort.

2. Click **New**. The fields in the lower portion of the window are enabled.
3. In the *Name* field, enter a name that identifies the type of association you are creating.
4. The association type ID is generated automatically, and displayed in the *ID* field. You cannot modify the generated association type ID.
5. The association type code is generated automatically, and displayed in the *Code* field. You cannot modify the generated association type code.
6. In the *Namespace* dropdown field, select the local, editable namespace in which you are creating this association type. Only local namespaces are included in the list.
7. The value in the *Connects* dropdown field indicates if the association type represents a connection between **Two Concepts**, between a concept and a synonym (**Concept With Synonymous Term**) or **Two Terms**. Select the kind of connection this association type represents.
8. The value in the *Purpose* dropdown field indicates how associations assigned this type will be used. Select **Mapping** when the association is to map concepts or terms across namespaces. Select **History** when the association is created to archive relationships between concepts or terms (for example, if a concept is expected to be retired). **Arbitrary** (the default) applies for all other associations.
9. The *Inverse Name* describes the inverse relationship of this association, and displays when you view **Inverse Concept Associations** (e.g., when you perform a search). For example, "**Is Narrower Than**" is the inverse of "**Is Broader Than**."
10. Click **Apply** to update the selected local namespace with the new association type; the new association type is added to the table on the *Association Type Editor* window. The *Association Type Editor* window remains displayed; you can click **New** again and create additional association types in the local namespace.
11. When you finish creating association types, click **Close** to close the *Association Type Editor* window.

View and Edit an Association Type

Follow this procedure to view information for an existing association type that exists in any namespace, and edit the information if the association type was created in a local, writable namespace.

1. Select **Association Types** from the **Tools** menu. The *Association Type Editor* window displays.



   Information for each existing association type is listed in a table format, in columns that you can resize. Information includes the association type name, the namespace in which the association was created, and an indicator that references if the association type is for a connection between **Two Concepts**, between a concept and a synonym (**Concept With Synonymous Term**) or between **Two Terms**.

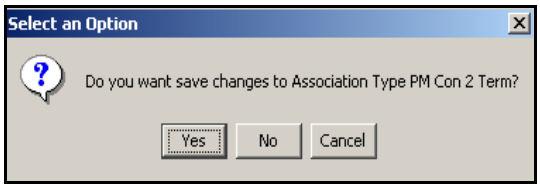
   To change the sort for the association type list, click the column header for the characteristic (**Association Type**, **Namespace**, or **Connects**) on which you want to base the sort.

2. In the association type table listing, click the association type you want to view or modify to highlight the row. The lower portion of the window changes to reflect information from that association type. If the association type you selected was created in a subscription namespace, none of the fields are editable. If the association type was created in a local, writable namespace, the editable fields are enabled.

3. In the *Name* field, modify the association type name, as necessary.

4. The *ID* that was generated when the association type was created displays; the ID is not editable, for any type of namespace.
5. The association type *Code* that was generated when the association type was created displays; the code is not editable, for any type of namespace.
6. The *Namespace* in which the association type was created is not editable, for any type of namespace.
7. The value in the *Connects* dropdown field indicates if the association type represents a connection between **Two Concepts**, between a concept and a synonym (**Concept With Synonymous Term**), or **Two Terms**. The value in the *Connects* field is editable as long as this is an association type that was created in a writable namespace, and no concepts exist that have this association type.
8. The value in the *Purpose* dropdown field indicates how associations assigned this type will be used. Select **Mapping** when the association is to map concepts or terms across namespaces. Select **History** when the association is created to archive relationships between concepts or terms. **Arbitrary** (the default) applies for all other association types.
9. The *Inverse Name* describes the **inverse relationship** of this association, and displays when you view **Inverse Concept Associations** (e.g., during a search). For example, "**Is Narrower Than**" is the inverse of "**Is Broader Than**."
10. Click **Apply** (which becomes enabled if you make an edit) to update the selected local namespace with the association type edits; the *Association Type Editor* window remains displayed for additional edits and/or additions.

    To ignore the edits, click on any other association type listed in the table to display information specific to that association type. When the confirmation window similar to the following displays, click **No** to proceed without update of the edits.

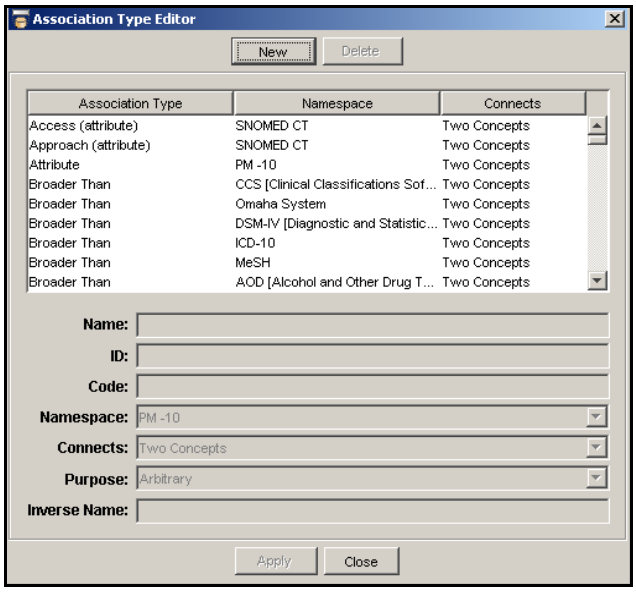


11. Click **Close** to close the *Association Type Editor* window.

Delete an Association Type

Follow this procedure to delete an existing association type that was created in a local, writable namespace. If there are associations that exist with this association type, you will not be permitted to delete the association type.

1. Select **Association Types** from the **Tools** menu. The *Association Type Editor* window displays.

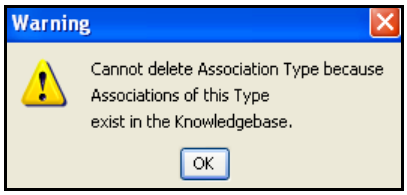


   Information for each existing association type is listed in a table format, in columns that you can resize. Information includes the association type name, the namespace in which the association was created, and an indicator that references if the association type is for a connection between **Two Concepts**, between a concept and a synonym (**Concept With Synonymous Term**) or between **Two Terms**.

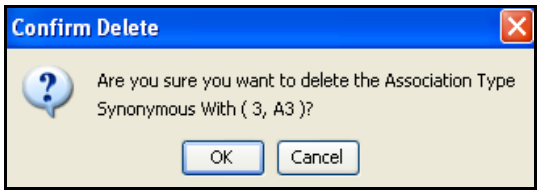
   To change the sort for the association type list, click the column header for the characteristic (**Association Type**, **Namespace**, or **Connects**) on which you want to base the sort.

2. In the association type table listing, click the association type you want to delete to highlight the row. The lower portion of the window changes to reflect information from that association type.

3. Click **Delete**. A window similar to the following displays if associations with this type exist in a local namespace.



As long as associations of this type exist, you will not be permitted to delete the association type. If no associations with this type exist, a delete confirmation window similar to the following displays.



Click **OK** to delete the association type from the namespace in which it was created; the association type is removed from the table on the *Association Type Editor* window. Click **Cancel** to ignore the deletion.

4. Click **Close** to close the *Association Type Editor* window.

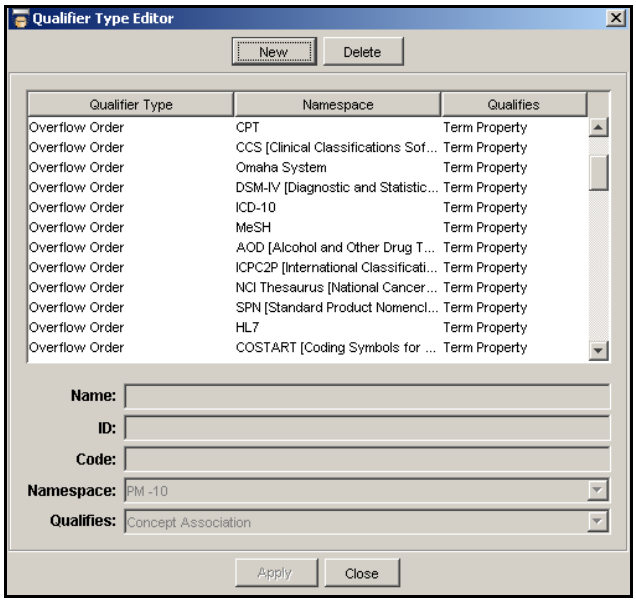
Association Qualifier Types

For each association you can specify (optionally) an established **qualifier type** and **value**. For an association type, a qualifier provides additional detail regarding the nature of a concept or term association (for example, the origin of an association, or the degree of accuracy of a mapping between concepts, such as **Usually**). You can assign a qualifier type and value to each association between concepts or terms. The following procedures pertain to creating and maintaining qualifier types.

Create Association Qualifier Types

Follow this procedure to add one or more new association qualifier types to a local, editable namespace.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.



Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references the kind of association it qualifies, either **Concept Association** or **Term Association** (the **Concept Property** and **Term Property** values relate to qualifier types for concept and term **properties**). To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

2. Click **New**. The fields in the lower portion of the window are enabled.
3. Specify a name for the new association qualifier type in the *Name* field.
4. The qualifier type ID is generated automatically, and displayed in the *ID* field. You cannot modify the generated qualifier type ID.
5. The qualifier type code is generated automatically, and displayed in the *Code* field. You cannot modify the generated qualifier type code.
6. From the *Namespace* field dropdown list, select the local namespace to which this association qualifier type should be written. Since a qualifier type can be written to editable namespaces only, only these namespaces are included in the list.

7. The value you select in the *Qualifies* field dropdown list indicates the kind of association this qualifier type will qualify. Select **Concept Association** for a qualifier of an association between two concepts, or **Term Association** for a qualifier of an association between two terms. (The **Concept Property** and **Term Property** options relate to qualifier types for concept and term **properties**.)

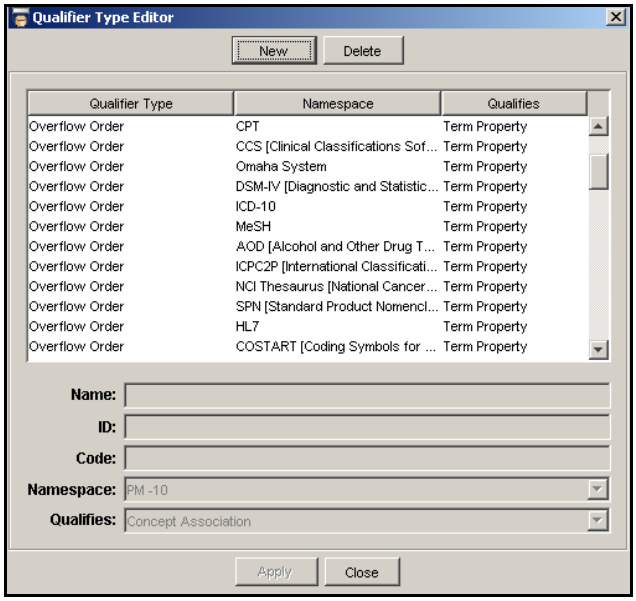
8. Click **Apply** to update the selected local namespace with the new association qualifier type; the new qualifier type is added to the table on the *Qualifier Type Editor* window. The *Qualifier Type Editor* window remains displayed; click **New** again to create additional association qualifier types in the local namespace.

9. Click **Close** to close the *Qualifier Type Editor* window.

View and Edit an Association Qualifier Type

Follow this procedure to view information for an existing association qualifier type, and to perform any required edits.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.



Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references the kind of association it qualifies, either **Concept Association** or **Term Association** (the **Concept Property** and **Term Property** options relate to qualifier types for concept and term **properties**).

To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

2. In the qualifier type table listing, click the association qualifier type you want to view or modify to highlight the row. The data in the bottom portion of the window changes to reflect information for that association qualifier.

   If the association qualifier type was created in a local (writable) namespace, you can modify the qualifier type *Name*, as needed. The *Name* is not editable if the association qualifier type is from a subscription namespace.

3. The *ID* generated for the association qualifier type when it was created displays. The field is not editable.

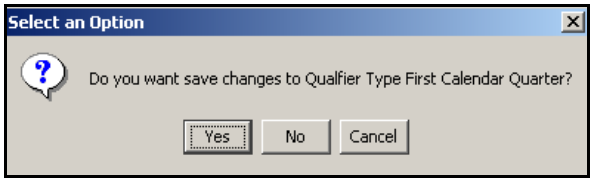
4. The *Code* generated for the association qualifier type when it was created displays. The field is not editable.

5. The *Namespace* in which this association qualifier type was created displays. The field is not editable.

6. The value in the *Qualifies* field indicates the kind of association this type qualifies (the field is not editable, regardless of the namespace in which the qualifier type was created). **Concept Association** represents a qualifier of an association between two concepts; **Term Association** represents a qualifier of an association between two terms. (The **Concept Property** and **Term Property** options relate to qualifier types for concept and term properties; these options are addressed in the *Properties* discussions.).

7. Click **Apply** (which becomes enabled if you make an edit) to update the selected local namespace with the association qualifier type edits; the *Qualifier Type Editor* window remains displayed if you want to view or edit other qualifier types.

   To ignore the edits, click on any other association qualifier type listed in the table to display information specific to that association type. When the confirmation window similar to the following displays, click **No** to proceed without update of the edits.

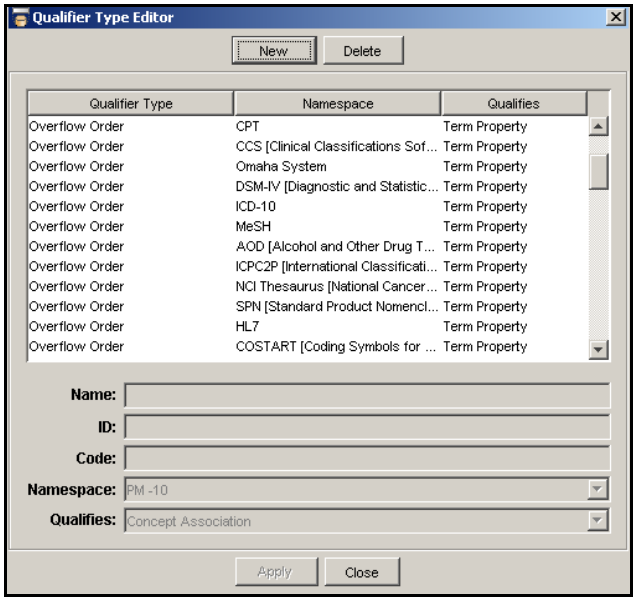


8. Click **Close** to close the *Qualifier Type Editor* window.

Delete an Association Qualifier Type

Follow this procedure to delete an existing association qualifier type from a local namespace. The association qualifier type must have been created in a local (i.e., writable) namespace in order for you to delete it.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.



   Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

   Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references the kind of association it qualifies, either **Concept Association** or **Term Association** (the **Concept Property** and **Term Property** options relate to qualifier types for concept and term **properties**).

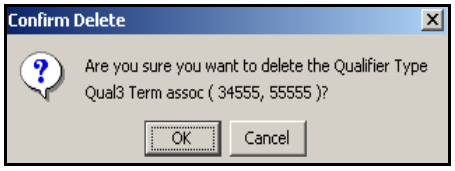
   To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

2. In the qualifier type table listing, click the association qualifier type you want to delete to highlight the row. The lower portion of the window changes to reflect information from that association qualifier type.

3. Click **Delete**. If the association qualifier type you selected for deletion is from a non-writable namespace, a message window displays indicating that you cannot delete that type.

Click **OK**, then select an association qualifier type from a writable namespace and click **Delete**.

Note: If the qualifier type has been assigned to one or more associations in a local namespace, a window displays indicating that you will not be permitted to delete this qualifier type. Click **OK** to exit the delete process. If there are no associations that have been assigned this qualifier type, a delete confirmation window similar to the following displays.

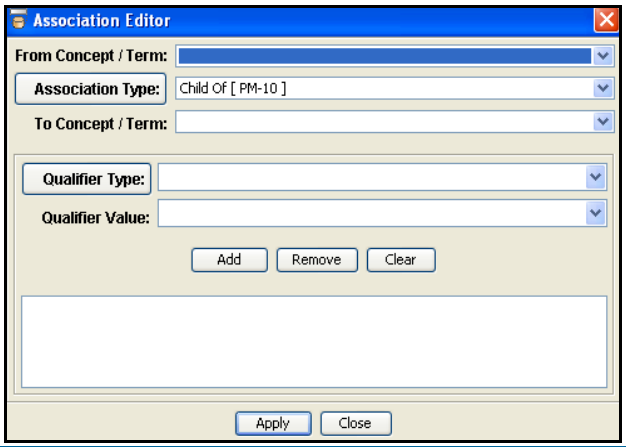


4. Click **OK** to delete the association qualifier type from the namespace; the association qualifier type is removed from the table on the *Qualifier Type Editor* window. Click **Cancel** to ignore the deletion.

Create Associations

Follow this procedure when you want to add one or more new associations between two existing concepts or terms in a local namespace. You also can add an association between concepts or terms in a subscription namespace, provided the desired association type (and optional qualifier type) was created in the current local namespace.

1. Select **Associations** from the **Tools** menu, or click the **Association Editor** icon on the *DTS Editor Main* window toolbar. The *Association Editor* window displays.

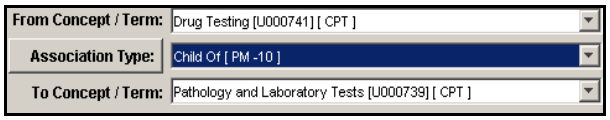


2. From another displayed panel or window (e.g., *Concept Tree* panel) drag the **from** concept in the **From/To** association, then drop it into the *From Concept/Term* field on the *Association Editor* window. The name of the concept/term displays; the namespace in which it was created displays in brackets.

3. A new association is written to the local namespace where the association type was created. From the *Association Type* field dropdown list, select the type of association (e.g., **Broader Than**, **Narrower Than**) you are creating between the concepts or terms. Only association types from the **current local namespace** are listed, alphabetically. Refer to the *Association Types* discussions.

   You have the option of **filtering** the association types that are available from the *Association Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Association Type* field dropdown list, or select an alternate association type, only the pre-selected types display in the list. Refer to the *Filter Association Types* discussion.

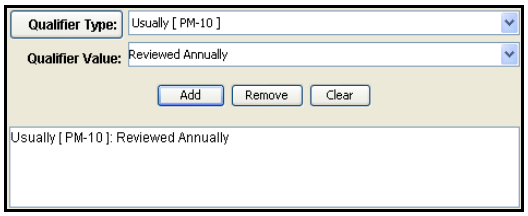
4. From another displayed panel or window, drag the **target** concept/term in the association in the *To Concept/Term* dropdown field. The name of the **to** concept/term displays; the namespace in which it was created displays in brackets.



5. For each association you can add one or more qualifiers, each of which consists of an established association qualifier type and value. Qualifiers provide additional detail regarding the nature of a concept or term association (e.g., **Usually**).

   From the *Qualifier Type* field dropdown list, select a qualifier type to assign to this association. The list reflects association qualifier types that were created in the same local namespace where the selected **association type** was created (refer to the *Association Qualifier Types* discussions).

6. For the qualifier (type) you selected for this association, specify the association qualifier value in the *Qualifier Value* field. For each association you can create multiple qualifiers of different types, or create occurrences of the same qualifier type, each with a separate value. Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the display area in the lower portion of the window. Note the illustration.



To remove an individual qualifier type/value combination from the association, highlight the appropriate line in the display area and click **Remove**. To clear all displayed association qualifier type/value combinations, click **Clear**.

As is the case for association types, you have the option of **filtering** the association qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be included in the list. Refer to the *Filter Association Qualifier Types* discussion later in this section.

7. Click **Apply** to add the new association. If you added this association for a concept/term in a subscription namespace, then you later view the concept/term (e.g., on the *Concept/Term Details* panel) the association will display in italics to indicate that it was added as local content for the subscription namespace.

   The *Association Type Editor* window remains displayed. You can click **New** again and create additional associations in the local namespace.

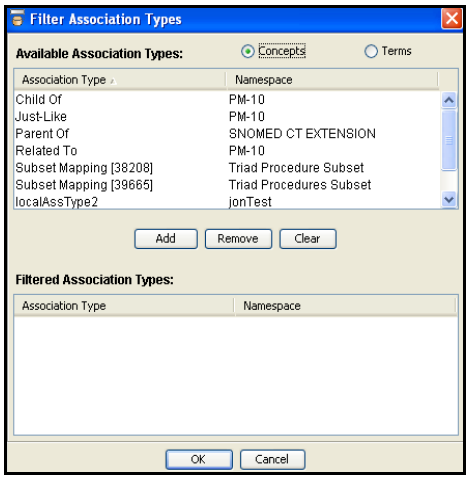
8. Click **Close** to close the *Association Editor* window.

Filter Association Types

You can **filter** the list of association types that are available from the *Association Type* dropdown field. Using the filtered list may simplify data entry if you are creating many associations at one time.

1. To filter the association type list, click the *Association Type* field button on the *Association Editor* window.

   The *Filter Association Types* window displays.

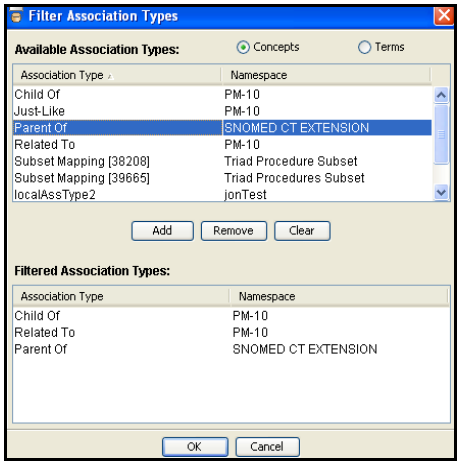


In the table in the top portion of the window, association types from all local namespaces for which the user has been granted edit permission are listed alphabetically for **Concept** associations (the default) or **Term** associations (click **Terms** at the top of the window). Refer to the *Create User/Assign Namespace Permissions* discussion in the *DTS Server Operations Guide* for procedures on assigning namespace edit permissions to a user.

Each association type name is listed, along with the namespace where the type was created. To change the list sort, click the column header for the characteristic (**Association Type**, **Namespace**) on which you want the sort based.

2. In the association type table in the upper portion of the window, click one of the desired association types to highlight it for selection (you must select each association type individually).

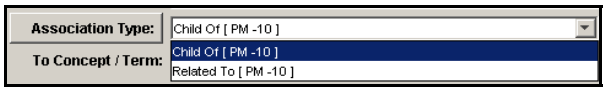
3. Click **Add**. The type you selected is added to the **Filtered Association Types** area; the namespace where the association type was created also is listed.



4. To remove an individual association type from the filtered list, highlight the appropriate line in the **Filtered Association Types** area and click **Remove**. To clear all displayed association types from the filtered list, click **Clear**.

5. When you are satisfied with your filtered list selections, click **OK**. Those filtered association types, that **also are in the current local namespace**, will be the only ones listed in the *Association Type* field dropdown list on the *Association Editor* window. If the filtered list includes no association types from the current local namespace, then no types are listed in the *Association Type* field dropdown list.

   Based on the selections in the previous illustration, the association types **Child Of** and **Related To** would be listed in the *Association Type* field dropdown list (the filtered association types are in the current local namespace).



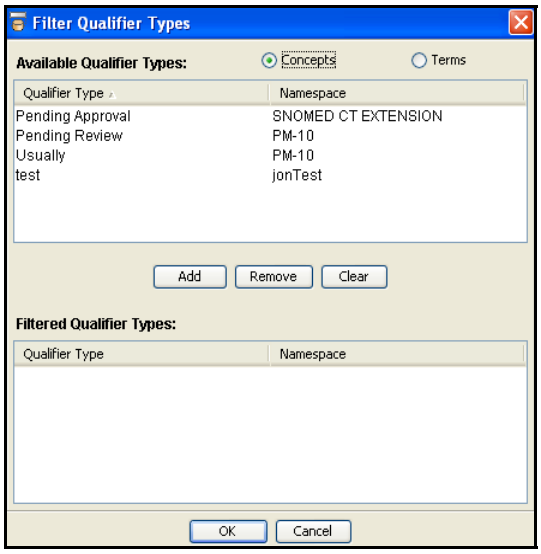
To select a new set of filtered association types for the list, click the *Association Type* field button again and select from the *Filter Association Types* window.

Filter Association Qualifier Types

You can filter the list of association qualifier types that are available from the *Qualifier Type* dropdown field. Using the filtered list may simplify data entry if you are entering many qualifiers at one time.

1. To filter the association qualifier type list, click the *Qualifier Type* field button on the *Association Editor* window.

The *Filter Qualifier Types* window displays.

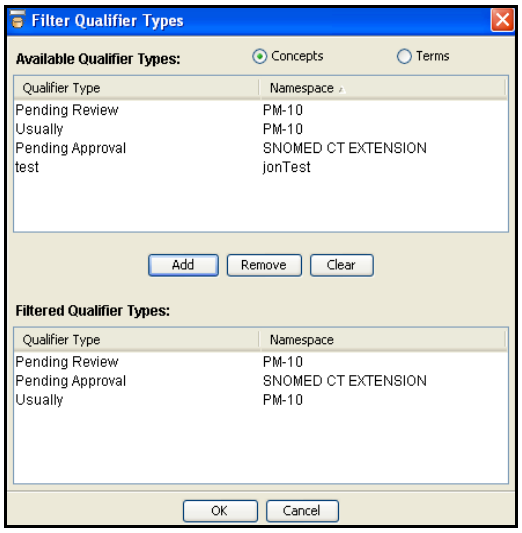


In the table in the top portion of the window, association qualifier types from all local namespaces for which the user has been assigned edit permission are listed alphabetically for Concepts (the default) or Terms (click Terms at the top of the window). Refer to the *Create User/Assign Namespace Permissions* discussion in the *DTS Server Operations Guide* for procedures on assigning namespace edit permissions to a user.

Each association qualifier type name is listed, as well as the namespace where the type was created. To change the list sort, click the column header for the characteristic (Qualifier Type, Namespace) on which you want the sort based.

2. In the qualifier type table in the upper portion of the window, click one of the desired association qualifier types to highlight it for selection (you must select each type individually).

3. Click **Add**. The association qualifier type you selected is added to the **Filtered Qualifier Types** area in the lower portion of the window; the namespace where the qualifier type was created also is listed.

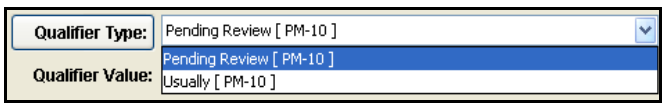


4. To remove an individual association qualifier type from the filtered list, highlight the appropriate line in the **Filtered Qualifier Types** area and click **Remove**. To clear all displayed qualifier types from the filtered list, click **Clear**.

5. When you are satisfied with the selections in the filtered list, click **OK**.

   Those filtered association qualifier types that are in the current local namespace, and that **also** match the *Association Type* local namespace, will be the only ones listed in the *Qualifier Type* field dropdown list on the *Association Editor* window. If the filtered list includes no association qualifier types from the current local namespace that also match the *Association Type* local namespace, then no types are listed in the *Association Type* field dropdown list.

   Based on the selections in the previous illustration, the types **Pending Review** and **Usually** would be listed in the *Qualifier Type* field dropdown list (the *Association Type* and these filtered types are in the current local namespace).



   To select a new set of filtered qualifier types for the list, click the *Qualifier Type* field button again and make your selections on the *Filter Qualifier Types* window.

Synonym Maintenance

Any concept, in any namespace, can have one or more **synonymous terms**. In DTS, a term is an occurrence of a character string in a namespace (i.e., terminology). However, an identical string can have different meanings within, or across, namespaces.

For example, **Cold** can indicate a temperature reference, and **cold** can indicate an infection. If you wanted to establish a relationship between the concept **Respiratory Infection** and the term **cold** (the illness) you could establish **cold** as a synonym of **Respiratory Infection**.

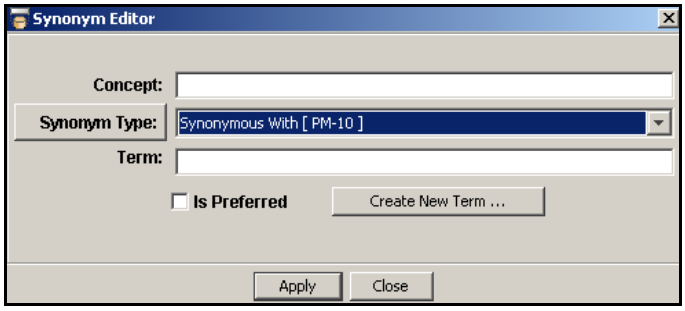
This section includes procedures for creating and maintaining associations between concepts and synonymous terms. A synonym always pairs a concept with a synonymous term (never a concept with a concept, or a term with a term).

You must assign an established association type (e.g., **Assoc. Concept w/Synon. Term**) to each synonymous association between concepts and terms. You can create associations between concepts and terms that reside in the same namespace, or across namespaces.

Create Synonyms

Follow this procedure when you want to create a relationship (i.e., an association) between a concept and one or more **synonymous** terms. You can create the relationship between the concept and the synonymous term if the concept is in a subscription namespace, provided the desired association type, and optional qualifier type, were created in the current local namespace.

1. Select **Synonyms** from the **Tools** menu. The *Synonym Editor* window displays.



2. From another displayed panel or window (e.g., *Concept Tree* panel) drag the concept/term for which you are establishing a synonym, then drop it into *Concept* field on the *Synonym Editor* window. The name of the concept/term displays; the namespace in which it was created displays in brackets.

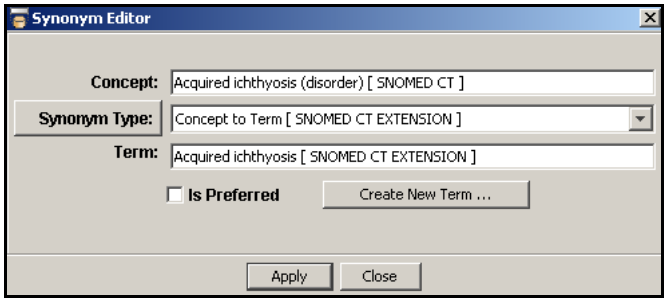
3. A new (synonymous) association between the concept and the term you select will be written to the local namespace where the association type was created.

From the *Synonym Type* field dropdown list, select the type of association (e.g., **Concept to Term Assoc**) you are creating between the concept and the term you intend to select.

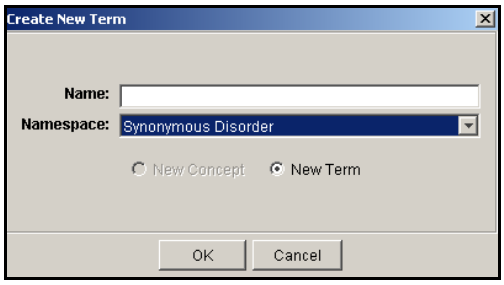
Note that this alphabetized list includes only association types that represent a connection between a concept and a synonymous term, created in the **current local namespace** (which displays in brackets). Refer to the *Association Types* discussions.

You have the option of **filtering** the association types that are available from the *Synonym Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Synonym Type* field dropdown list, or select an alternate association type, only the pre-selected association types will be included in the list. Refer to the *Filter Association Types* discussion earlier in the guide for instructions on creating a filtered list of associations types between concepts and synonymous terms.

4. From one of the other display windows or panels, drag the term you want to establish as a synonym, and drop it into the *Term* field on the *Synonym Editor* window. The term displays, with the namespace in which it was created displayed in brackets.



If you would rather create a **new** term to establish as a synonym, click **Create New Term**. The *Create New Term* window displays.



Specify the *Name* of the new synonymous term. From the *Namespace* field dropdown list, select the local, editable namespace in which it will reside (local namespaces are listed alphabetically).

If the concept for which you are creating a synonymous term is from a subscription namespace, you should create the synonymous term in the current local namespace. The synonym you are adding is a *New Term* (the only option). Click **OK**.

5. In the event multiple synonyms exist for a specific concept, you can designate that one of the synonyms *Is Preferred*. Click the *Is Preferred* field checkbox on the *Synonym Editor* window to designate this synonym as the **preferred** synonym.
6. Click **Apply** to add the synonym to the (editable) namespace.
7. Click **Close** to close the *Synonym Editor* window.

Property Maintenance

A property is a piece of user-defined information that can be linked to a concept or term, and can be used for any purpose. For example, a property can be a textual definition for a concept, or can identify the source terminology where a term originated.

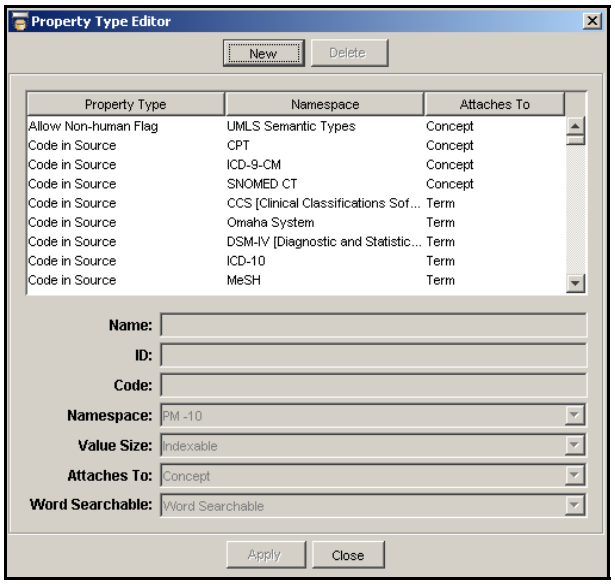
A property type (i.e., definition) is assigned to each property to define the nature of the property. One or more qualifier types and values can be assigned to each property as well. Procedures for creating properties, property types, and property qualifier types are included in the following discussions.

Property Types

Create Property Types

Follow this procedure to add a new property type to a local namespace. You then can assign the property type to a concept in any local namespace, or add the property type (as local content) for a concept in a subscription namespace.

1. Select **Property Types** from the **Tools** menu. The *Property Type Editor* window displays.



Information for each existing property type is listed in a table format, in columns you can resize. Information includes the property type name, the namespace in which the property type was created, and an indicator that references if the property type is for a property assigned to a **Concept** or a **Term**.

To change the sort for the property type list, click the column header for the characteristic (**Property Type**, **Namespace**, or **Attaches To**) on which you want to base the sort.

2. Click **New**. The information displayed in the lower portion of the window for the existing property type is cleared.
3. In the *Name* field, specify the name for the new property type.
4. The property type ID is generated automatically, and displayed in the *ID* field. You cannot modify the generated property type ID.
5. The property type code is generated automatically, and displayed in the *Code* field. You cannot modify the generated property type code.
6. From the *Namespace* field dropdown list, select the local namespace in which this property type will be created. The list includes only local, writable namespaces.
7. From the *Attaches To* field dropdown list, indicate if the property type is for properties that you will assign to a **Concept** or a **Term**.
8. The *Value Size* refers to the maximum length of a property value that can be assigned to this property type. For a property type that attaches to a concept, select (from the field dropdown list) from the options **Indexable**, **Searchable**, and **Big**.

   Indexable properties are up to 749 characters in length, and provide for the fastest access; property types that attach to terms have a value size of **Indexable**. **Searchable** properties are up to 4000 characters.

   A *Value Size* of **Big** designates a property type value character string of more than 4000 characters. A **Big** property is not searchable.
9. For a property type that attaches to a concept, select (from the *Word Searchable* field dropdown list) from the options **Word Searchable** and **Not Word Searchable**.

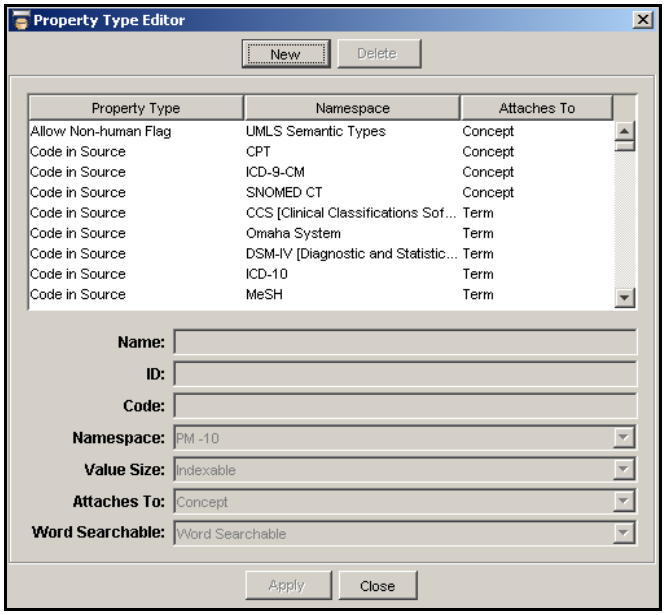
   Designating a property type as word searchable is the first step in enabling a word match search on concept properties of this type. Property types that attach to terms have a value of **Not Word Searchable**.

   After concept properties of this type have been created, the Knowledgebase Administrator must run the **KB Admin** utility. Refer to the *Configure Word Match Search* discussion in the *Knowledgebase Administrators Guide*.
10. Click **Apply** to update the selected local namespace with the new property type; the new property type is added to the table on the *Property Type Editor* window. The *Property Type Editor* window remains displayed; you can click **New** again and create additional property types in a local namespace.
11. When you finish creating property types, click **Close** to close the *Property Type Editor* window.

View and Edit a Property Type

Follow this procedure to view information for an existing property type in any namespace, and edit the information if it was created in a local, writable namespace.

1. Click **Property Types** on the *DTS Editor Main* window's **Tools** menu. The *Property Type Editor* window displays.



   Information for each existing property type is listed in a table format, in columns you can resize. Information includes the property type name, the namespace in which the property type was created, and an indicator that references if the property type is for a property assigned to a **Concept** or a **Term**.

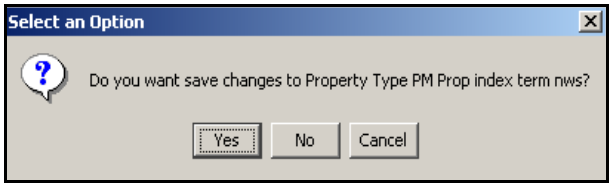
   To change the sort for the property type list, click the column header for the characteristic (**Property Type**, **Namespace**, or **Attaches To**) on which you want to base the sort.

2. Click the property type you want to view or modify to highlight the row. The lower portion of the window changes to reflect information from that type.
   If the property type you selected was created in a subscription namespace, none of the fields are editable. If the property type was created in a local, writable namespace, the editable fields are enabled.

3. In the *Name* field, modify the property type name, as necessary.

4. The *ID* code generated for the property type when it was created displays. The ID is not editable, regardless of the namespace in which the property type was created.
5. The *Code* generated for the property type when it was created displays; the code is not editable, regardless of the namespace in which the type was created.
6. The *Namespace* in which the property type was created is not editable, for any type of namespace.
7. The *Attaches To* value indicates if the property type is for properties that you will assign to a **Concept**, or a **Term**. The field is not editable if the property type is in use currently for a concept or a term.
8. The *Value Size* refers to the maximum length of a property value that can be assigned to this property type (**Indexable**, **Searchable**, and **Big**). The field is not editable if the property type is in use currently for a concept or a term.
9. In the *Word Searchable* field dropdown list, the options are **Word Searchable** and **Not Word Searchable**. The field is not editable, regardless of the namespace in which the property type was created.
10. Click **Apply** (which becomes enabled if you make an edit) to update the namespace with the edits. The *Property Type Editor* window remains displayed for additional edits and/or additions.

    To ignore the edits, click on any other property type listed in the table to display information specific to that property type. When the confirmation window similar to the following displays, click **No** to proceed without update of the edits.

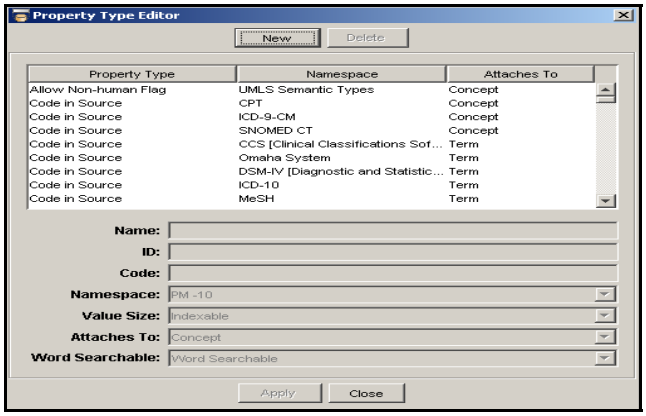


11. Click **Close** to close the *Property Type Editor* window.

Delete a Property Type

Follow this procedure to delete an existing property type from a local namespace.

1. Click **Property Types** on the *DTS Editor Main* window's **Tools** menu. The *Property Type Editor* window displays.

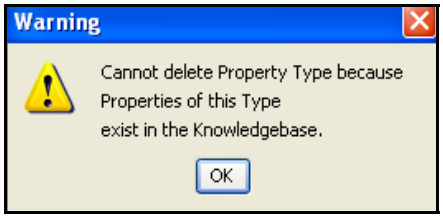


   Information for each existing property type is listed in a table format, in columns you can resize. Information includes the property type name, the namespace in which the property type was created, and an indicator that references if the property type is for a property assigned to a **Concept** or a **Term**.

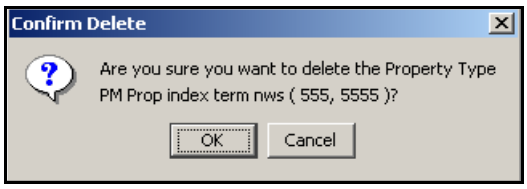
   To change the sort for the property type list, click the column header for the characteristic (**Property Type**, **Namespace**, or **Attaches To**) on which you want to base the sort.

2. Click the property type you want to delete to highlight the row. The lower portion of the window changes to reflect information from that property type.

3. Click **Delete**. A window similar to the following displays if properties with this type are in use for concepts in a local namespace.



   As long as concepts with this property type exist, you will not be permitted to delete the property type. If no concepts have properties with this type, a delete confirmation window similar to the following displays.



4. Click **OK** to delete the property type from the namespace; the property type is removed from the table on the *Property Type Editor* window. Click **Cancel** to ignore the deletion.

Property Qualifier Types

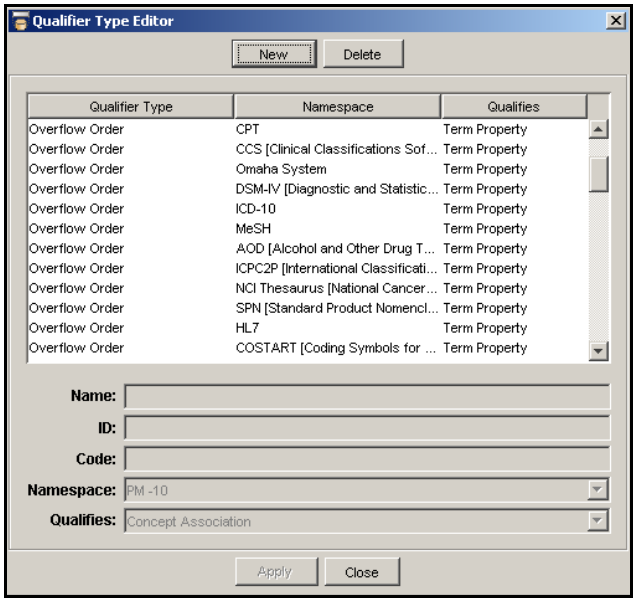
For each property you can specify an established **qualifier type** and **value**. These provide additional detail regarding the nature of a concept or term property (e.g., a property **effective date**, or an indicator reflecting that the property is **Current**).

You can assign a type and value to each concept or term property qualifier. The following procedures pertain to creating and maintaining property qualifier types.

Create Property Qualifier Types

Follow this procedure to add new property qualifier types to a local namespace.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.



Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references if the type qualifies properties for concepts or terms (**Concept Property**, **Term Property**). The **Concept Association** and **Term Association** values refer to qualifiers you establish for associations within, or across, namespaces.

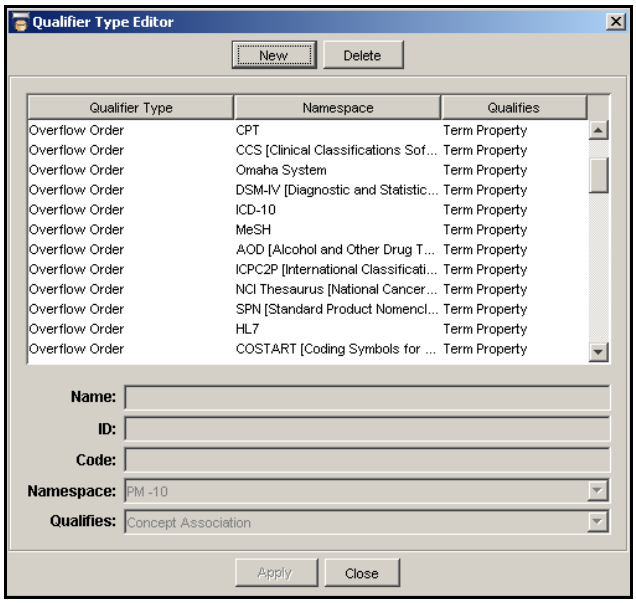
To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

2. Click **New**. The information displayed in the lower portion of the window for the existing qualifier type is cleared.
3. Specify a name for the new property qualifier type in the *Name* field.
4. The qualifier type ID is generated automatically, and displayed in the *ID* field. You cannot modify the generated qualifier type ID.
5. The qualifier type code is generated automatically, and displayed in the *Code* field. You cannot modify the generated qualifier type code.
6. From the *Namespace* field dropdown list, select the local namespace to which this property qualifier type should be written. Since a qualifier type can be written to local, editable namespaces only, only these namespaces are included in the list.
7. The value you select in the *Qualifies* field dropdown list indicates if this qualifier type will qualify properties for concepts or terms. Select **Concept Property** or **Term Property**, as appropriate (**Concept Association** and **Term Association** refer to qualifiers you establish for associations within, or across, namespaces).
8. Click **Apply** to update the selected local namespace with the new property qualifier type; the new qualifier type is added to the table on the *Qualifier Type Editor* window. The *Qualifier Type Editor* window remains displayed; you can click **New** again and create additional property qualifier types in the local namespace.
9. Click **Close** to close the *Qualifier Type Editor* window.

View and Edit a Property Qualifier Type

Follow this procedure to view information for an existing property qualifier type, and to perform any required edits.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.



   Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

   Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references if the type qualifies properties for concepts or terms (**Concept Property**, **Term Property**); the **Concept Association** and **Term Association** values refer to qualifiers you establish for associations within, or across, namespaces.

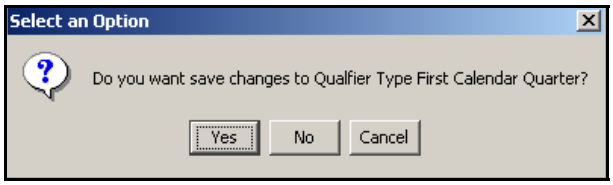
   To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

2. In the qualifier type table listing, click the property qualifier type you want to view or modify to highlight the row. The data in the bottom portion of the window changes to reflect information for that property qualifier.

   If the property qualifier type was created in a local (writable) namespace, you can modify the qualifier type *Name*, as needed. The *Name* is not editable if the property qualifier type is from a subscription namespace.

3. The *ID* generated for the property qualifier type when it was created displays. The field is not editable, regardless of the namespace in which the qualifier type was created.
4. The *Code* generated for the property qualifier type when it was created displays. The field is not editable, regardless of the namespace in which the qualifier type was created.
5. The *Namespace* in which this property qualifier type was created displays. The field is not editable.
6. The value in the *Qualifies* field dropdown list indicates if this qualifier type qualifies properties for concepts or terms (**Concept Property** or **Term Property**). The field is not editable, regardless of the namespace in which the qualifier type was created.
7. Click **Apply** (which becomes enabled if you make an edit) to update the selected local namespace with the property qualifier type edits. The *Qualifier Type Editor* window remains displayed if you want to view or edit other qualifier types.

   To ignore the edits, click on any other property qualifier type listed in the table to display information specific to that property qualifier type. When the confirmation window similar to the following displays, click **No** to proceed without update of the edits.

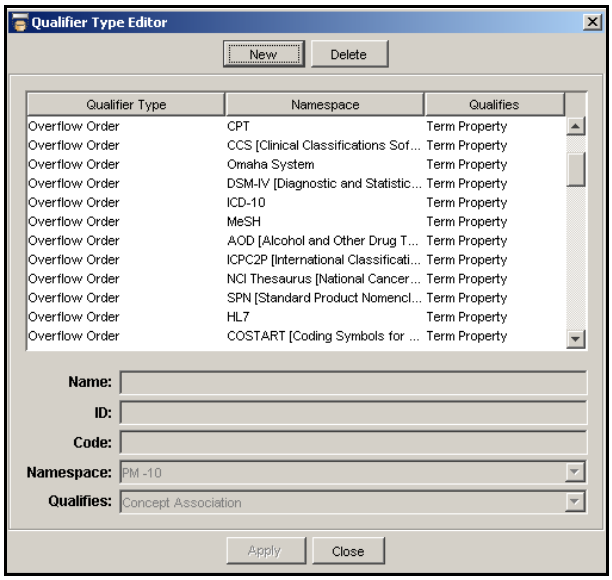


8. Click **Close** to close the *Property Type Editor* window.

Delete a Property Qualifier Type

Follow this procedure to delete an existing qualifier type from a local namespace. The qualifier type must have been created in a local, writable namespace in order for you to delete it.

1. Select **Qualifier Types** from the **Tools** menu. The *Qualifier Type Editor* window displays.

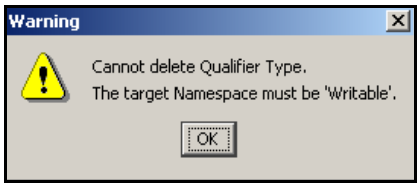


   Information for existing qualifier types (for both associations and properties) is listed in a table format in columns you can resize. Qualifier types from both writable and non-writable namespaces are listed.

   Table information includes the qualifier type name, the namespace in which the qualifier was created, and an indicator that references if the type qualifies properties for concepts or terms (**Concept Property**, **Term Property**); the **Concept Association** and **Term Association** values refer to qualifiers you establish for associations within, or across, namespaces. To change the sort for the qualifier type list, click the column header for the characteristic (**Qualifier Type**, **Namespace**, or **Qualifies**) on which you want to base the sort.

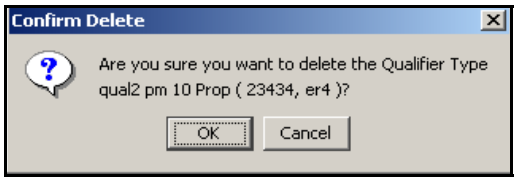
2. In the qualifier type table listing, click the property qualifier type you want to delete to highlight the row. The lower portion of the window changes to reflect information from that property qualifier type.

3. Click **Delete**. If the property qualifier type you selected for deletion is from a non-writable namespace, a message window displays indicating that you cannot delete that type.



Click **OK**, then select a property qualifier type from a writable namespace and click **Delete**. **Note:** If the qualifier type has been assigned to one or more properties in a local namespace, a window displays indicating that you will not be permitted to delete this qualifier type. Click **OK** to exit the delete process.

If there are no properties that have been assigned this qualifier type, a delete confirmation window similar to the following displays.

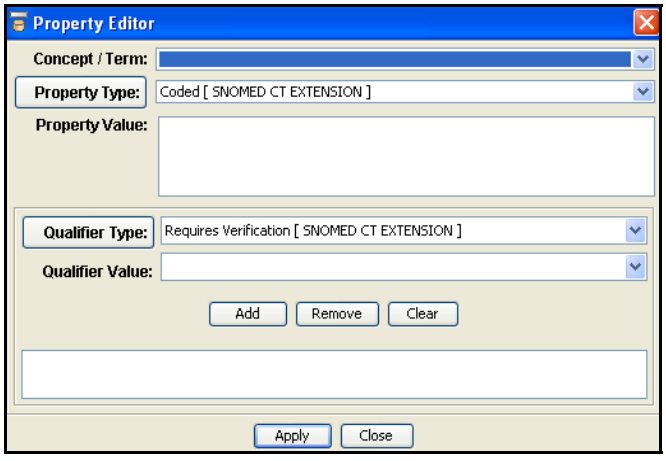


4. Click **OK** to delete the property qualifier type from the namespace; the property qualifier type is removed from the table on the *Qualifier Type Editor* window. Click **Cancel** to ignore the deletion.

Assign Properties to a Concept

Follow this procedure when you want to add one or more established properties to an existing concept or term in a **local** namespace. You also can add a property to a concept/term in a subscription namespace, provided the desired property type (and optional qualifier type) exists in the **current local namespace**.

1. Select **Properties** from the **Tools** menu, or click the **Property Editor** icon on the *DTS Editor Main* window toolbar. The *Property Editor* window displays.



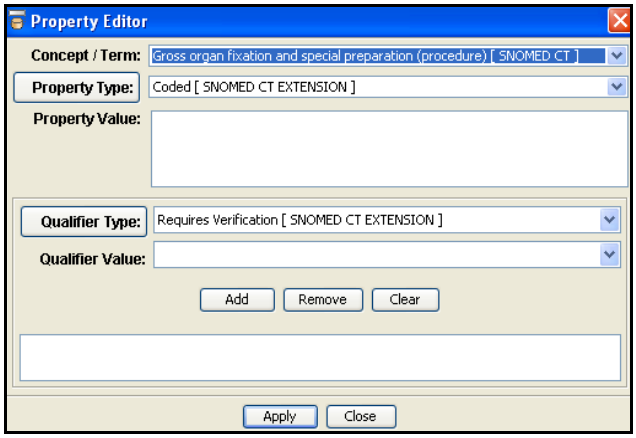
2. From another displayed panel or window (e.g., *Concept Tree* panel) drag the concept/term for which you want to create a property and drop it into the *Concept/Term* field. The name of the concept/term displays, and the namespace in which it exists displays in brackets.

3. A property type is the pre-established identifier that defines the property. From the *Property Type* field dropdown list, select a property definition to be assigned to the concept or term. If the concept/term in the *Concept/Term* field is from a subscription namespace, the *Property Type* dropdown list includes only property types created in the current local namespace, listed alphabetically.

   If the *Concept/Term* was created in a local namespace, the *Property Type* list includes property types created in the current local namespace, but **only** if the *Concept/Term* also was created in the current local namespace. If the concept/term was not created in the current local namespace, the *Property Type* field dropdown list will be empty. Refer to the *Property Types* discussions.

   You have the option of **filtering** the property types that are available from the *Property Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a property type from the *Property Type* field dropdown list, or select an alternate property type, only the pre-selected types will be included in the list. Refer to the *Filter Property Types* discussion.

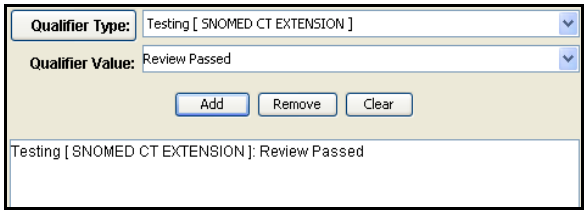
4. For the property definition (type) assigned to this concept/term, enter the property value in the *Property Value* text area. This area accommodates the entry of large amounts of text, as well as formatted text (e.g., paragraphs, bulleted items, etc.). A single concept/term can have multiple occurrences of the same property type, each with a separate, unique value.



5. For each property you may specify an established property **qualifier type** and **value** to provide details regarding the nature of a concept or term property (e.g., **Current**). From the *Qualifier Type* field dropdown list, select the qualifier to assign to this property.

The list includes only those **property** qualifier types that were created in the same local namespace where the selected *Property Type* was created (refer to the *Property Qualifier Types* discussion earlier in the guide). For the property qualifier (type) you selected for this concept or term, specify the qualifier value in the *Qualifier Value* field. For each property you can create multiple occurrences of the same qualifier type, each with a separate, unique value.

Click **Add** after you specify the property *Qualifier Type* and *Qualifier Value*; both are added to the display area in the lower portion of the window. Note the illustration.



To remove an individual qualifier type/value combination from the property, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier type/value combinations, click **Clear**.

You have the option of **filtering** the property qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a property qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be included in the list. Refer to the *Filter Property Qualifier Types* discussion later in this section.

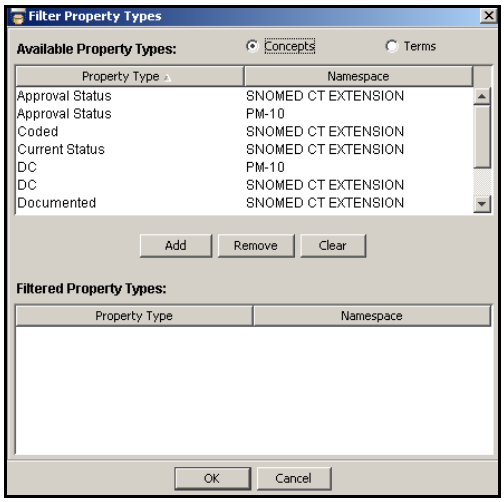
6. Click **Apply** to add the new property to the current local namespace. If you added this property to a concept in a subscription namespace, then you later view the concept/term (e.g., on the *Concept/Term Details* panel) the property will display in italics to indicate it was added as local content for the subscription namespace.

Filter Property Types

You can **filter** the list of property types that are available from the *Property Type* dropdown field. Using the filtered list may simplify data entry if you are assigning many properties to concepts at one time.

1. To filter the property type list, click the *Property Type* field button on the *Property Editor* window.

The *Filter Property Types* window displays.

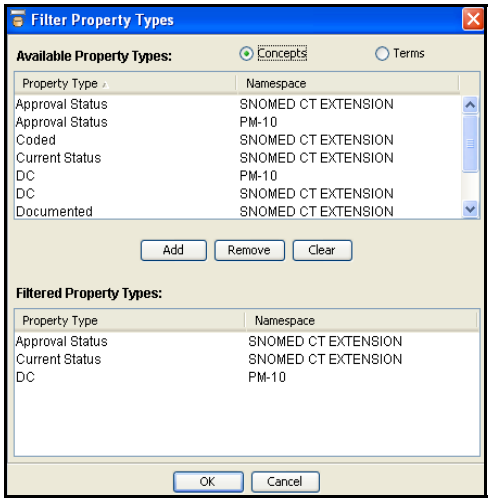


In the table in the top portion of the window, property types from all local namespaces for which the user has been granted edit permission are listed alphabetically. Refer to the *Create User/Assign Namespace Permissions* discussion in the *DTS Server Operations Guide* for procedures on assigning namespace edit permissions to a user.

Each property type name is listed, as well as the namespace where the property type was created. To change the list sort, click the column header for the characteristic (**Property Type**, **Namespace**) on which you want the sort based.

2. In the property type table in the upper portion of the window, click one of the desired property types to highlight it for selection (you must select each property type individually).

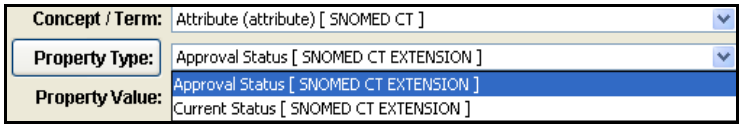
3. Click **Add**. The property type you selected is added to the **Filtered Property Types** area in the lower portion of the window. The namespace in which each selected property type was created is listed as well.



4. To remove a type from the filtered list, highlight the appropriate line in the **Filtered Property Types** area and click **Remove**. To clear all types, click **Clear**. The filtered list may include property types from more than one local namespace.
5. When you are satisfied with your filtered list selections, click **OK**.
6. If the *Concept/Term* on the *Property Editor* window was created in a subscription namespace, those filtered property types that **also** are in the current local namespace will be the only ones listed in the *Property Type* field dropdown list.

   If the *Concept/Term* on the *Property Editor* window was created in a local namespace, the property type list includes property types created in the current local namespace, but only if the *Concept/Term* on the *Property Editor* window **also** was created in the current local namespace. If the concept/term was not created in the current local namespace, the *Property Type* field dropdown list will be empty. Refer to the *Property Types* discussions.

   Based on the selections in the previous illustration, the property types **Approval Status** and **Current Status** would be listed in the *Property Type* field dropdown list on the *Property Editor* window (the filtered property types are in the current local namespace, which matches the local namespace where the *Concept/Term* was created).



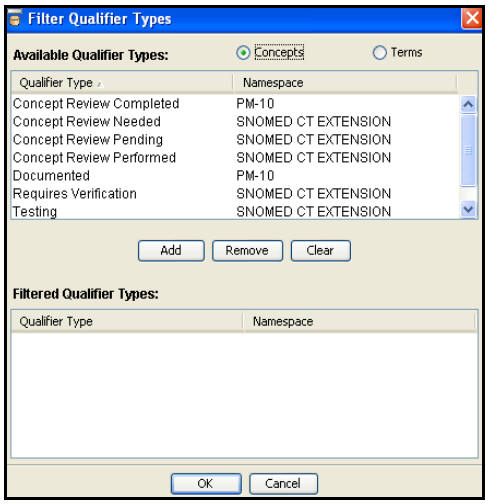
   To select a new set of filtered property types for the list, click the **Property Types** field button again and make your selections on the *Filter Property Types* window.

Filter Property Qualifier Types

You can **filter** the list of property qualifier types that are available from the *Qualifier Type* dropdown field. Using the filtered list may simplify data entry if you are entering many property qualifiers at one time.

1. To filter the property qualifier type list, click the *Qualifier Type* field button on the *Property Editor* window.

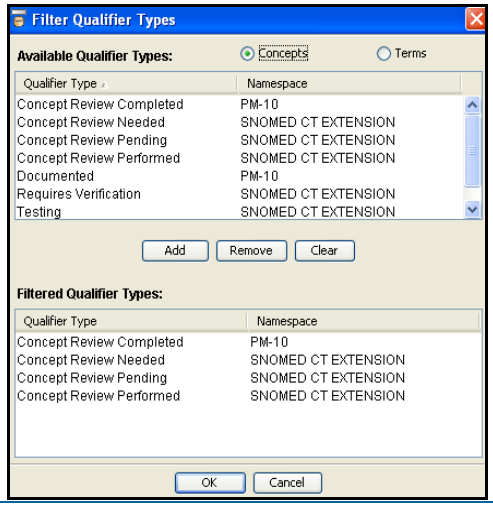
   The *Filter Qualifier Types* window displays.



In the table in the top portion of the window, property qualifier types from all local namespaces for which the user has been granted edit permission are listed alphabetically. Refer to the *Create User/Assign Namespace Permissions* discussion in the *DTS Server Operations Guide* for procedures on assigning namespace edit permissions to a user.

Each qualifier type name is listed, as well as the namespace where the qualifier type was created. To change the list sort, click the column header for the characteristic (**Qualifier Type**, **Namespace**) on which you want the sort based.

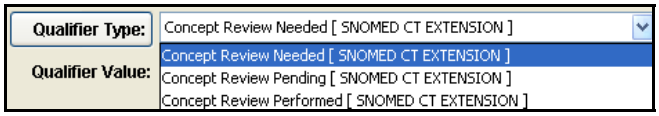
2. In the qualifier type table in the upper portion of the window, click one of the desired property qualifier types to highlight it for selection (you must select each type individually).
3. Click **Add**. The property qualifier type you selected is added to the **Filtered Qualifier Types** area in the lower portion of the window; the namespace for each selected qualifier is listed as well.



4. To remove an individual property qualifier type from the filtered list, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier types from the filtered list, click **Clear**.
5. When you are satisfied with the selections in the filtered list, click **OK**.

   Those filtered property qualifier types that also are in the current local namespace, and that **also** match the *Property Type* local namespace, will be the only ones listed in the *Qualifier Type* field dropdown list on the *Property Editor* window. If the filtered list includes no property qualifier types from the current local namespace that also match the *Property Type* local namespace, then no types are listed in the *Property Type* field dropdown list.

   Based on the selections in the previous illustration, the qualifier types **Concept Review Needed**, **Concept Review Pending**, and **Concept Review Performed** would be listed in the *Qualifier Type* field list on the *Property Editor* window (the filtered qualifier types are in the current local namespace, which matches the local namespace of the *Property Type*).



   To select a new set of filtered property qualifier types, click the *Qualifier Type* field button again and make your selections on the *Filter Qualifier Types* window.

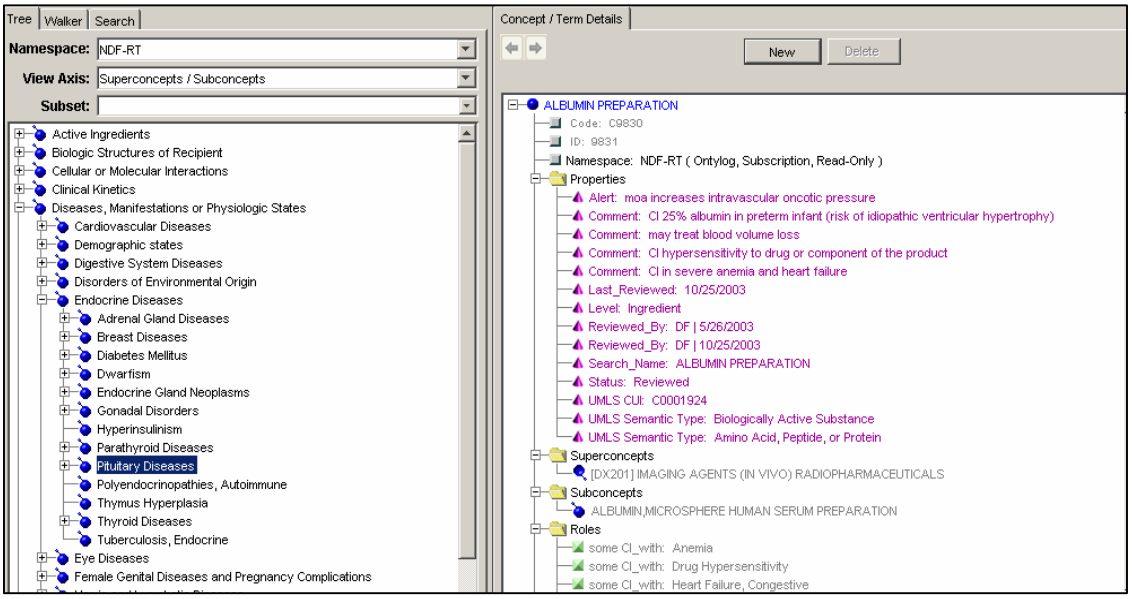
Concept Maintenance

The discussions in this section relate to viewing details of existing concepts or terms, and the creation of a new concept or term in a local namespace.

View Concept/Term Details

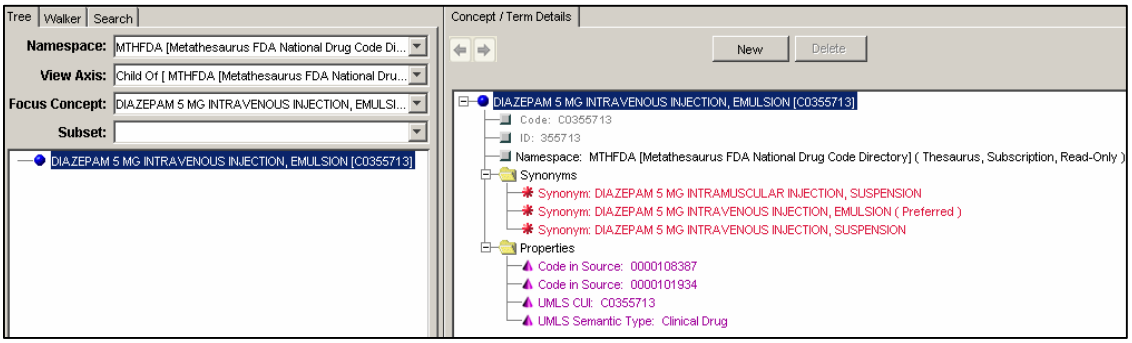
The *Concept/Term Details* panel displays as the default in the right pane of the *DTS Editor Main* window when it first opens. For an Ontylog namespace you want to view, you can display detailed attribute information for each concept or term that you drag from any other display window or panel on the *Main* window. For a Thesaurus namespace, you can view details for any association that you drag from another window or panel on the main window.

In the following illustration, the concept **ALBUMIN PREPARATION**, from an Ontylog namespace, was dragged from the *Concept Tree* tab into the *Concept/Term Details* panel. The attributes (i.e., attribute folders) are expanded for view.



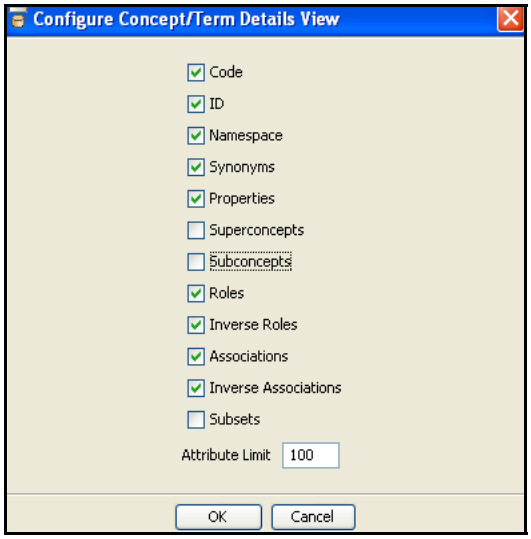
When you expand all, or selected attributes for view, the *Concept/Term Details* panel retains those tree settings for the next concept displayed in the view. Only those attributes that were expanded for the previous concept are "**auto-expanded**" for the new concept in the view.

In the next illustration, a focus concept from a Thesaurus namespace was dragged from the *Concept Tree* tab into the *Concept/Term Details* panel. The attributes are expanded for view.



Configure Concept/Terms Details Panel View

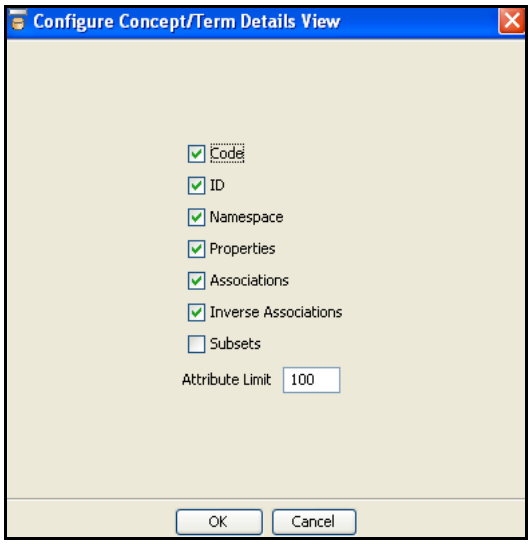
To select which attributes will display if there is a **concept** in the *Concept/Term Details* panel, right click the name of the concept you dragged into the panel, then click **Configure View**. The *Configure Concept/Term Details View* window displays, listing the attribute view options available when a concept is displayed in the panel.



As the default, all concept attributes are selected for display with the exception of **Superconcepts**, **Subconcepts**, and **Subsets**. To remove an attribute from the detail display, click the checkbox adjacent to that attribute to remove the check mark. To add an attribute, click the checkbox to insert a check mark.

Click **OK** when finished. Your display configuration is retained for later DTS sessions.

To select which attributes will display if there is a **term** displayed in the *Concept/Term Details* panel, right click the name of the term you dragged into the panel, then click **Configure View**. The *Configure Concept/Term Details View* window displays, listing the attribute view options available when a term is displayed in the panel.



As the default, all term attributes are selected for display with the exception of **Subsets**. To remove an attribute from the detail display, click the checkbox adjacent to that attribute to remove the check mark. To add an attribute, click the checkbox to insert a check mark. Click **OK** to save your display configuration.

Depending on your selected configuration, the following concept/term detail attributes will display. The icon that identifies each attribute is indicated.

Note that only the attributes present for a specific concept or term display on the *Concept/Term Details* panel, regardless of the configuration. For example, if a concept has no associations connected with it, the **Associations** folder does not display.

Concept (indicates displayed detail is for a **concept**)
Term (indicates displayed detail is for a **term**)

Concept **Code**
Concept **ID**
Concept **Namespace**
Concept **Synonyms**
- **Preferred Term**

Concept Properties
- **Concept Property Qualifiers**

Superconcepts
Subconcepts
Concept **Roles**
Concept **Inverse Roles**

Associations
- o **Associated Concepts** ("To" Concepts)
- o **Association Qualifiers**

Inverse Associations
- o **Inversely Associated Concepts** ("From" Concepts)
- o **Association Qualifiers**

Namespace **Subsets**

For local, writable namespaces, after you view concept details, you may select one of the available editor functions and make modifications to that specific concept's displayed attributes. Procedures for creating a new concept in a local namespace, and for viewing and editing existing concept attributes, are provided later in this section.

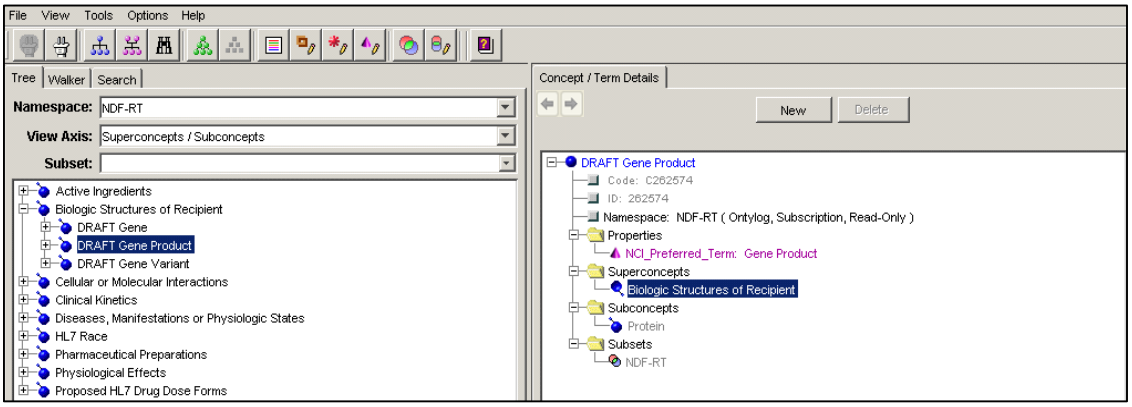
Attribute List Control

You can set the maximum number of attributes to be listed when you expand each attribute folder for a concept (i.e., **Associations**, **Properties**, etc.) on the *Concept/Term Details* panel. In the *Attribute Limit* field, specify the maximum number of attributes to list for each detail component; **100** is the default (specify **0** to list no concept attributes).

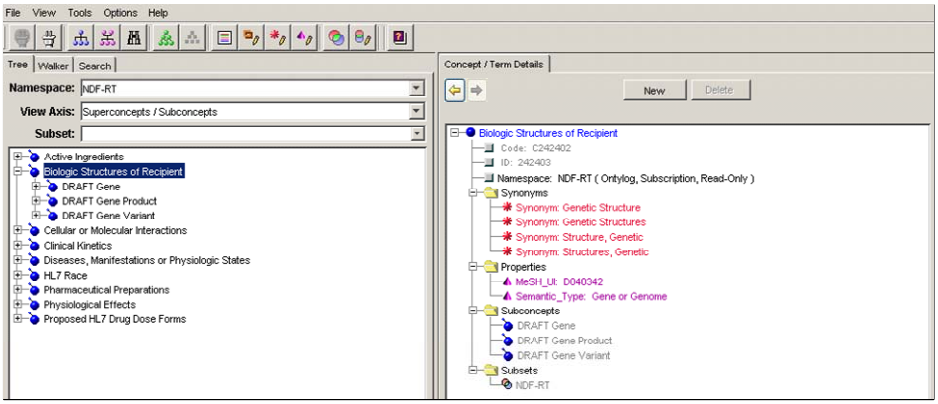
For example, enter **10** in the *Attribute Limit* field to limit the number of listed associations, properties, roles, etc., for each concept to **10**. Note: All **superconcepts** and **subconcepts** display for each concept when you expand the respective folder, regardless of the threshold you specify in the *Attribute Limit* field.

Navigate to Other Concepts or Terms From Displayed Detail

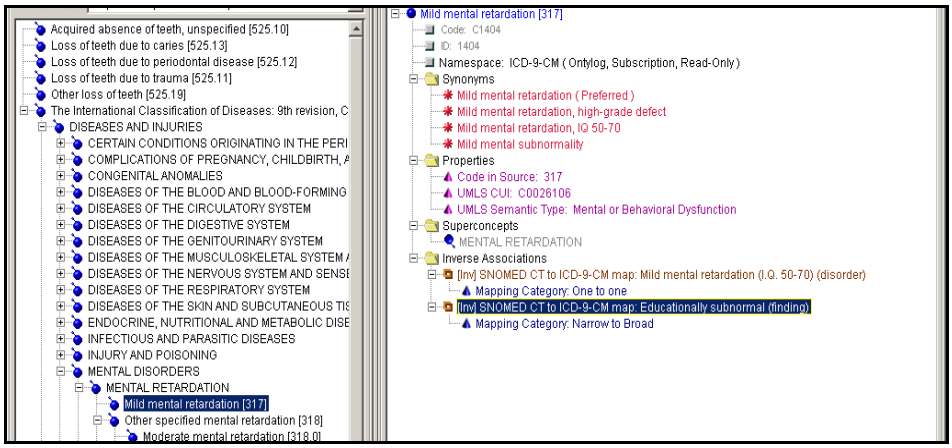
On the *Concept/Term Details* panel you can navigate to (and display attribute details for) another concept or term from the current attribute detail view. In the following *Concept/Term Details* panel illustration, the highlighted concept **Biologic Structures of Recipient** is a superconcept of the displayed concept **DRAFT Gene Product**.



To display detail attributes for **Biologic Structures of Recipient**, drag that concept and drop it into any empty area on the *Concept/Term Details* panel. The *Concept/Term Details* panel display refreshes, referencing attributes for **Biologic Structures of Recipient.**

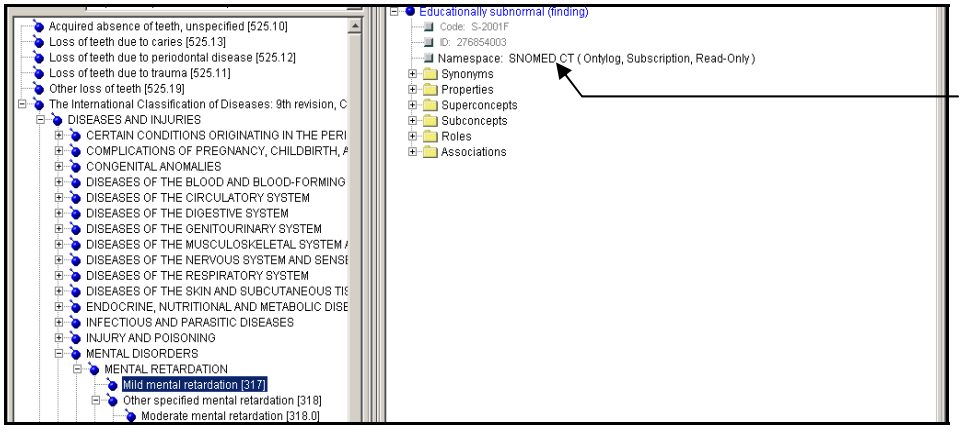


The previous illustrations reflect navigation to another concept within the same namespace. You also can navigate to, and display details for, a concept or term within another namespace. Note the inverse association highlighted in the next illustration.



Drag the selected inverse association and drop it into an empty area on the *Concept/Term Details* panel. The panel display refreshes, referencing the concept or term included in the inverse association you selected.

Note that new concept displayed in this illustration is from a different namespace.

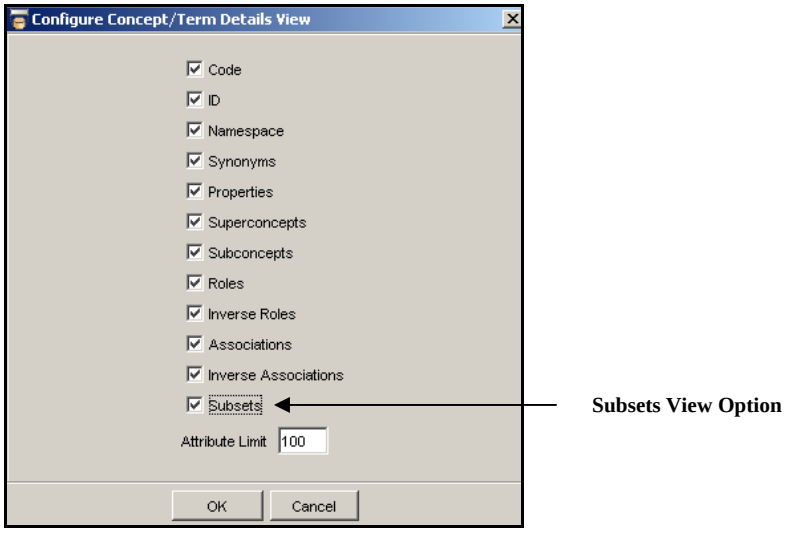


Different Namespace Referenced

For any displayed concept or term, you can navigate to those concepts or terms referenced in the displayed details (associations, inverse associations, roles, inverse roles, concepts or terms referenced as superconcepts, subconcepts, synonyms).

View Subsets in Which a Concept Resides

In addition to listing a concept's attributes in the *Concept/Term Details* panel, you have the option to list all subsets in which the concept in the view is included. Confirm that the **Subsets** option is checked in the *Configure Concept/Term Details View* window.



If the concept is included in one or more subsets, a **Subsets** folder is added to the *Configure Concept/Term Details View* panel view. Each subset in which the concept is included is listed in the folder, adjacent to the  icon.

If a subset is modified so that the concept in the view no longer is included in the subset, that subset is removed from the listing.

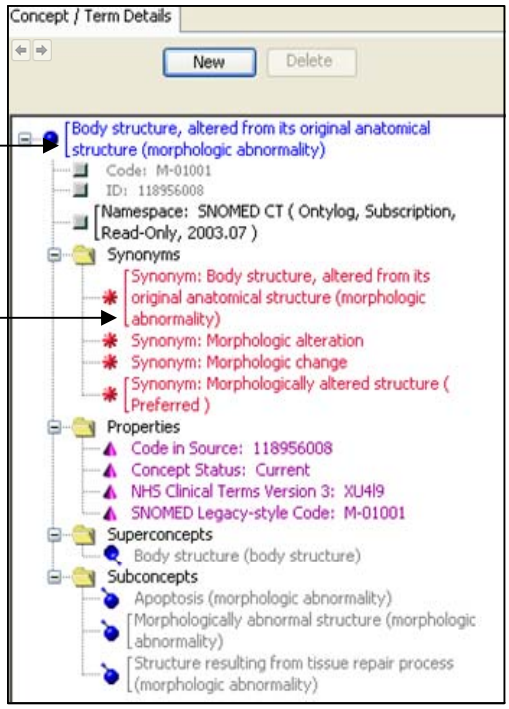
You can drag a subset listed on the *Concept/Term Details* panel, then drop it onto the *Subset Expression Editor* window to view and/or modify concept selection parameters for the subset. Refer to the *DTS Subset Editor Users Guide* for procedures on creating and maintaining subsets.

Concept Name and Attribute Text Wrapping

If lengthy concept names and/or attribute text extend beyond the border of the *Concept/ Term Details* panel, the text will wrap around to a new line. The concept name or attribute text also will be enclosed in brackets.

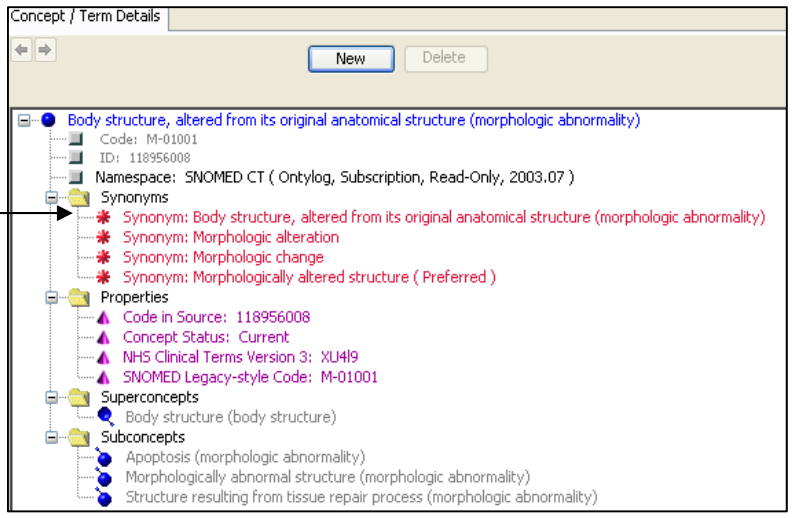
Wrapped Concept Name in Brackets

Wrapped Concept Attributes in Brackets



If you enlarge the *Concept/Term Details* panel, then drag a different concept into the panel, the enlarged panel size setting is retained. The text wrapping and brackets will be removed if they are not required in the larger panel.

Text Wrap and Brackets are Retained Only if Required



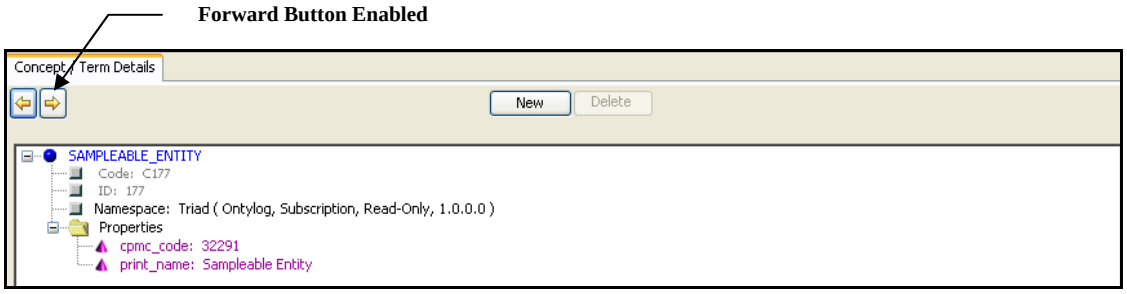
View *Concept/Term Details* Panel History Using Forward and Back Buttons

For your reference, a **history** is provided of the concepts and/or terms that were displayed previously in the same instance of the *Concept/Term Details* panel. Use the **Forward** and **Back** buttons to navigate through concepts and terms that you viewed or edited earlier.

For example, if you are viewing a concept or term in the *Concept/Term Details* panel, then subsequently drag a different concept or term into the panel for view or edit, the **Back** button becomes enabled. Note the illustration.

Click the **Back** button to review the concept that displayed in the panel previously (i.e., the concept in the *Concept/Term Details* panel's history). The view always reflects the current **Configure View** setting for the *Concept/Term Details* panel.

As soon as you click the **Back** button, the **Forward** button becomes enabled.



Click the **Forward** button repeatedly to redisplay the concept you dragged into the *Concept/Term Details* panel most recently. The button becomes disabled (grayed out) when the most recent concept is displayed.

The displayed history reflects the latest version of a concept or term. If a concept or term is updated after it was put in the history, the latest version of the concept or term is displayed when you click the **Forward** and **Back** buttons.

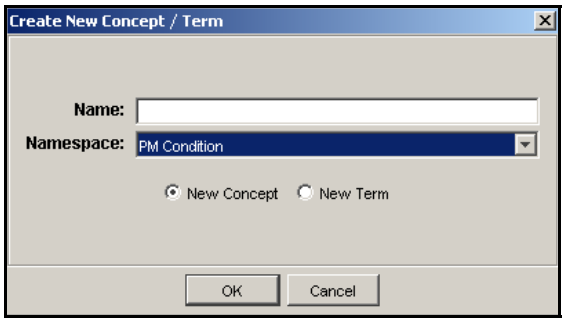
The *Concept/Term Details* panel history is available only for the current connection instance. The *Concept/Term Details* panel history will be reset when you disconnect from the DTS Editor.

Add a New Concept/Term to a Local Namespace

Create the New Concept

Follow this procedure to add a new concept or term to an established local namespace.

1. To create a new concept in a namespace, click **New** in the *Concept/Term Details* tab in the right panel of the *DTS Main* window. The *Create New Concept/Term* window displays.



2. Enter the name of the new concept in the *Name* field.
3. From the *Namespace* field dropdown list, select the local namespace to which the new concept will be added (only local, writable namespaces are listed).
4. The default, **New Concept**, applies if you are adding a new concept to the local namespace. Click **New Term** to add a new term to the local namespace.
5. To cancel the addition of the concept or term to the namespace, click **Cancel**. The *Create New Concept/Term* window closes.

   Click **OK** to add the concept or term to the selected namespace. The new concept name displays in the *Concept/Term Details* panel, and references the namespace in which you created it.

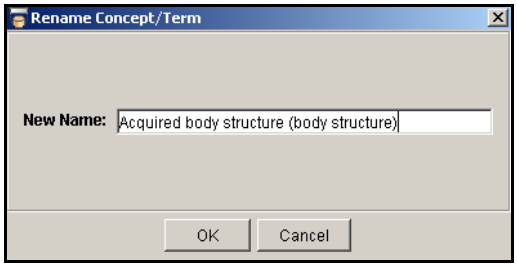
   The Concept **Code** and **ID** (which are assigned to the new concept automatically) display as well. Note that each concept ID is tracked so that if the concept is deleted at a later time, that concept ID is prevented from being reassigned to another new concept.

   To change the format of the assigned concept code and/or ID, follow the procedures outlined in the *Code and ID Generator* discussion later in the guide.

Change the Name of a Concept

You can change the name of an existing concept only if the namespace is writable.

1. Make sure the concept you want to modify displays on the *Concept/Term Details* panel. Right-click on the concept name.
2. On the displayed option list, click **Rename**. The *Rename Concept/Term* window displays, referencing the existing concept name.



3. Enter a *New Name* for the concept, and click **OK**. If the concept is in a namespace that is not writable, the following window displays.

Click **OK** to bypass the renaming of the concept.

If the concept you want to rename is in a writable namespace, the new name displays immediately in the *Concept/Term Details* panel. The namespace is updated with the new concept name.

Add a Synonym to a Concept

Use one of the following methods to add a synonym (with an association type established as local content in a local namespace) between concepts or terms in a subscription namespace. The synonymous term can exist in the same namespace as the concept, or in a different namespace. A synonym always pairs a concept with a synonymous term (never a concept with a concept, or a term with a term).

If you are creating a synonymous term as local content for a concept in a subscription namespace, the association type you select must be created already in the current local namespace; the resulting new synonym will be written to the current local namespace as well. You have the option of defining a new character string as the synonymous term, and linking that term to a concept.

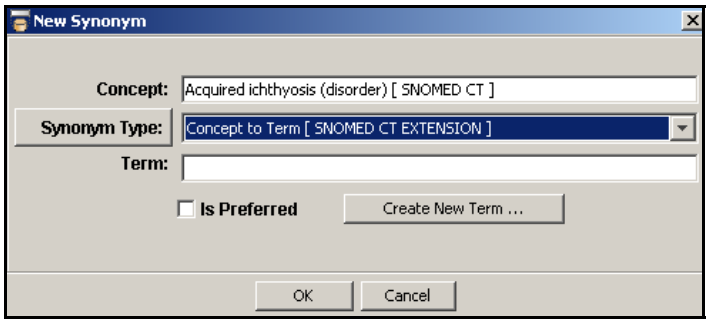
Create a Synonym – Click on Concept Name in *Concept/Term Details* Panel

Follow this procedure to link a synonymous term to a concept by right clicking on the new concept name in the *Concept/Term Details* panel.

1. If the new concept is displayed in the *Concept/Term Details* panel, right-click on the concept name. Select **Add Synonym** from the displayed options.

   To add a synonym to an existing concept, drag the concept from another displayed window or panel and drop it on the *Concept/Term Details* panel. Right-click on the concept name, then select **Add Synonym** from the displayed options.

   The *New Synonym* window displays.



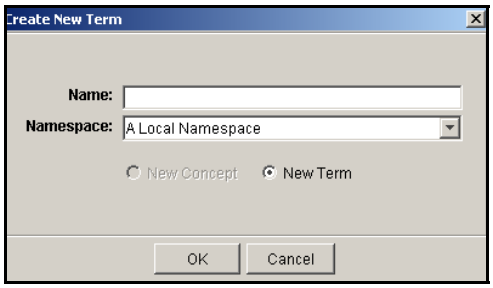
   The concept from the *Concept/Term Details* panel displays automatically in the *Concept* field.

2. If you are creating a synonymous term for a concept in a subscription or local namespace, only association types from the **current local namespace** are listed (alphabetically) in the *Synonym Type* dropdown field, and only those association types that represent connections between concepts and synonymous terms (**Concept to Term Assoc**); select the appropriate association type. A new (synonymous) association between the concept and the term you select will be written to the local namespace where the association type was created. Refer to the *Association Types* discussions.

   You have the option of **filtering** the association types that are available from the *Synonym Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Synonym Type* field dropdown list, or select an alternate association type, only the pre-selected association types will be included in the list. Refer to the *Filter Association Types* discussion.

3. From one of the other display windows or panels, drag the concept/term you want to establish as a synonym, and drop it into the *Term* field on the *New Synonyms* window. The term can be from the same namespace as the concept, or from a different namespace.

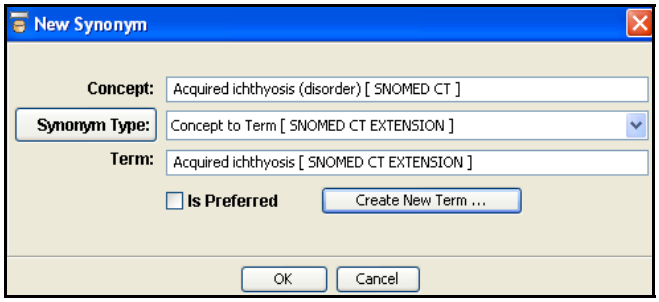
4. If you would rather create a new term (i.e., one not already existing in a namespace) to establish as a synonym, click **Create New Term**. The *Create New Term* window displays.



Specify the *Name* of the new synonymous term. From the *Namespace* field dropdown list, select the local, editable namespace in which it will reside (local namespaces are listed alphabetically). The synonym you are adding is a *New Term* (the only option).

5. Click **OK**. The *Create New Term* window closes.

6. In the event multiple synonyms exist for a specific concept, you can designate that one of the synonyms *Is Preferred*. On the *New Synonym* window, click the *Is Preferred* field checkbox to designate this synonym as the **preferred** synonym. This synonym will be referenced as **Preferred** when you expand the **Synonyms** folder on the *Concept/Term Details* panel.



7. Click **OK** on the *New Synonym* window to add the synonym to the current local namespace. In the **Synonyms** folder for the concept on the *Concept/Term Details* panel, the synonym displays in italics (to indicate that it is subscription content that was written to a local namespace).

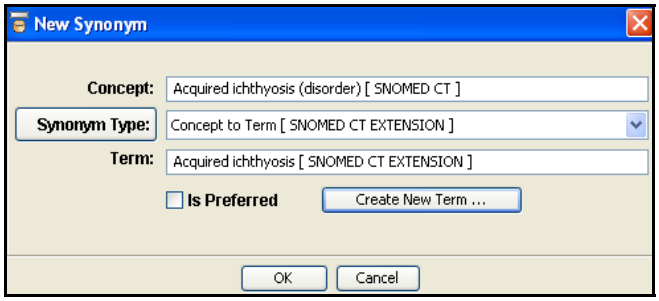
Create a Synonym – Control/Drag Concept into *Concept/Term Details* Panel

Follow this procedure to link a synonymous term to a concept displayed in the *Concept/Term Details* panel using the concept **Control/Drag** option.

1. Make sure the concept for which you want to add a synonymous term displays in the *Concept/Term Details* panel.
2. From another displayed panel or window (or another instance of the *Concept/Term Details* panel) select the term you want to add as a synonymous term, then drag it to the *Concept/Term Details* panel.

   The term can be from the same namespace as the concept, or from a different namespace, but the association type for it must reside in a **local** namespace (i.e., the association type must be created in a local namespace).
3. Hold the **Control** key down before you drop this concept into the *Concept/Term Details* panel.

   The *New Synonym* window displays. The concept from the *Concept/Term Details* panel displays in the *Concept* field, and the dragged concept populates the *Term* field (the namespace in which the concept resides is included in brackets).



4. Click **OK** on the *New Synonym* window to add the synonym to the current local namespace. When you expand the **Synonyms** folder for the concept on the *Concept/Term Details* panel, the synonym displays in italics (to indicate that it is subscription content that was written to a local namespace).

Create a Synonym – Control/Drag Local Synonym into *Concept/Term Details* Panel

Follow this procedure to select an existing synonym (in a **local** namespace) displayed in another panel, then add the synonym itself to a concept displayed in the *Concept/Term Details* panel using the concept **Control/Drag** option.

1. Make sure the concept for which you want to add a synonymous term displays in the *Concept/Term Details* panel.

2. From a concept displayed in another panel or window (or in another instance of the *Concept/Term Details* panel) select the local synonym you want to add; select the **local synonym itself** (**not** the entire concept); local synonyms display in italics.

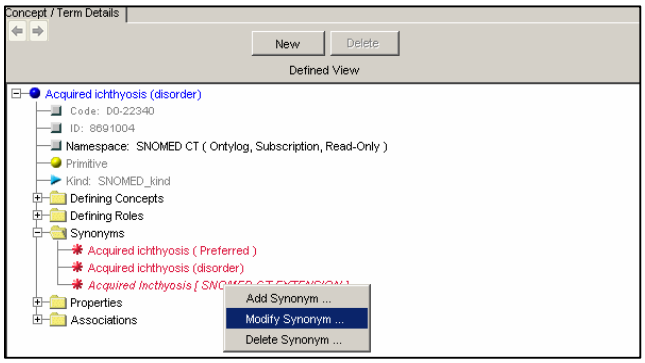
3. Drag the selected synonym to the *Concept/Term Details* panel. Hold the **Control** key down before you drop the synonym into the *Concept/Term Details* panel; the dragged synonym displays in italics.

Edit a Synonym

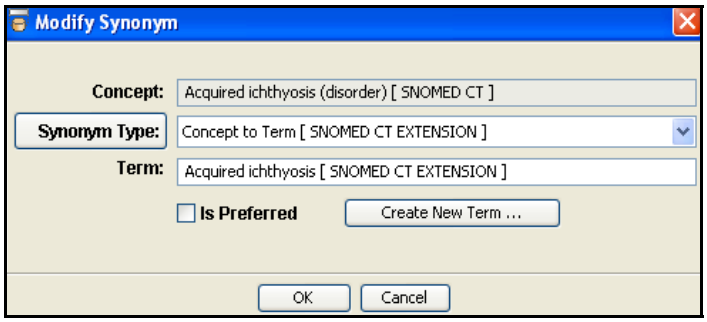
Follow this procedure to modify an existing synonym for a concept. You can modify an existing synonym for a concept in a subscription namespace, but only if the association type exists in a local namespace (i.e., the synonym is content in a local namespace, and is listed in italics).

1. To edit a synonym for an existing concept, drag the concept from another displayed window or panel and drop it on the *Concept/Term Details* panel.

2. For the displayed concept, click on the **Synonyms** folder to expand it. The existing synonyms for the concept display. Right-click on the synonym you want to edit, then select **Modify Synonym** from the displayed options.



The *Modify Synonym* floating window displays, referencing the concept and the synonymous term, as well as the namespace in which each resides.



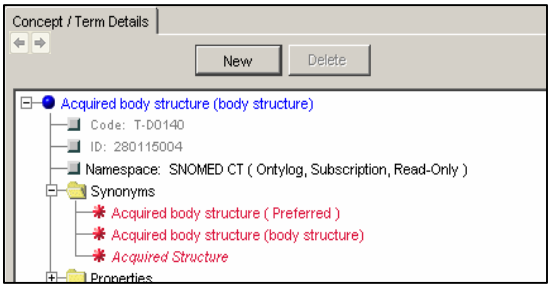
3. Make the desired edits, then click **OK** to update the appropriate namespace(s).

Delete a Synonym

Follow this procedure to delete an existing synonym for a concept that was created as content in a local namespace.

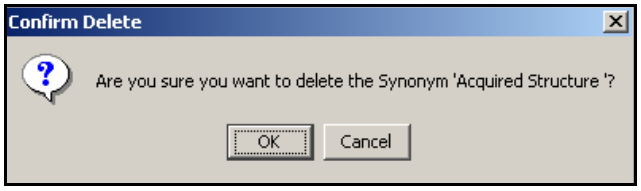
1. To delete a synonym for an existing concept in a local namespace, drag the concept from another displayed window or panel and drop it on the *Concept/Term Details* panel.

2. For the displayed concept, click on the **Synonyms** folder to expand it. The existing synonyms for the concept/term display. Each synonym that is content in a local namespace displays in italics.



3. Right-click on the synonym you want to delete, then select **Delete Synonym** from the displayed options. Note that if the synonym is in a namespace that is not editable, the **Delete Synonym** option is not available.

   The following confirmation window displays.



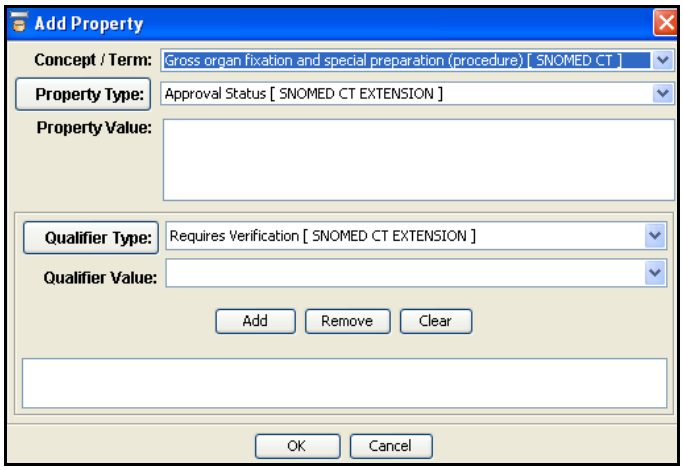
4. Click **OK** to delete the synonym from the local namespace where it resides. Click **Cancel** to ignore the deletion and close the window.

Add a Property to a Concept or Term

Follow this procedure to create a new property (as local content in the current local namespace) for a concept or term that resides in a subscription namespace.

1. Drag the concept/term for which you want to add a property into the *Concept/Term Details* panel.

2. Right-click on the concept/term name on the *Concept/Term Details* panel, then select **Add Property** from the displayed options. The *Add Property* window displays.



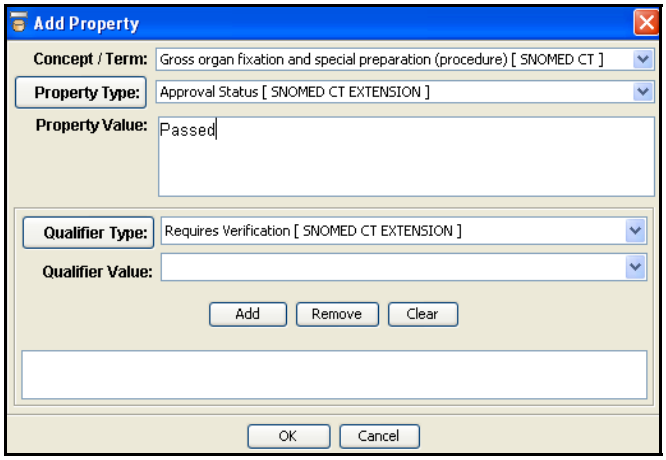
The concept/term from the *Concept/Term Details* panel displays automatically in the *Concept/Term* field, and the namespace in which it exists displays in brackets.

3. A property type is a pre-established identifier that defines the property. From the *Property Type* field dropdown list, select a property definition to be assigned to the concept or term. If the *Concept/Term* is from a subscription namespace, the *Property Type* dropdown list includes only property types created in the current local namespace, listed alphabetically.

   If the *Concept/Term* was created in a local namespace, the *Property Type* list includes property types created in the current local namespace, but **only** if the *Concept/Term* also was created in the current local namespace. If the concept/term was not created in the current local namespace, the *Property Type* field dropdown list will be empty. Refer to the *Property Types* discussions.

   You have the option of **filtering** the property types that are available from the *Property Type* field dropdown list by creating a pre-defined, filtered list of property types. When you attempt to select a property type from the *Property Type* field dropdown list, or select an alternate property type, only the pre-selected types will be included in the list. Refer to the *Filter Property Types* discussion earlier in the guide.

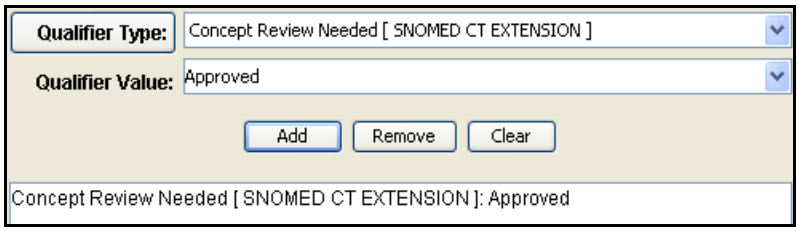
4. For the property definition (type) assigned to this concept or term, specify the property value in the *Property Value* text area. This area accommodates the entry of large amounts of text, as well as formatted text (e.g., paragraphs, bulleted items, etc.). A single concept or term can have multiple occurrences of the same property type, each with a separate, unique value.



5. For each property you may specify an established **qualifier type** and **value**; these provide additional detail regarding the nature of a concept or term property (e.g., **Current**). From the *Qualifier Type* field dropdown list, select the qualifier to assign to this property. The list includes only those **property** qualifier types that were created in the same local namespace where the selected property type was created (refer to the *Property Qualifier Types* discussions).

6. For the property qualifier (type) you selected for this concept or term, specify the qualifier value in the *Qualifier Value* field. For each property you can create multiple occurrences of the same qualifier type, each with a separate, unique value.

7. Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the area in the lower portion of the window. Note the illustration.



To remove an individual qualifier type/value combination from the property, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier type/value combinations, click **Clear**.

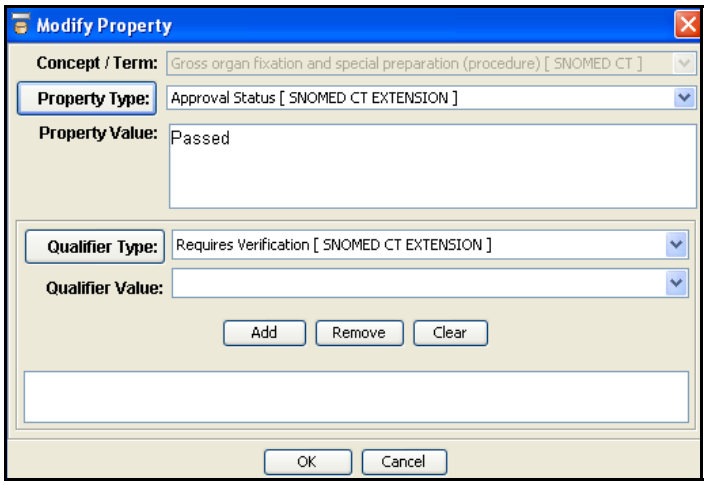
You have the option of **filtering** the property qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected property types will be included in the list. Refer to the *Filter Property Qualifier Types* discussion earlier in the guide.

8. Click **OK** on the *Add Property* window to add the property to the current local namespace. When you expand the **Properties** folder for the concept on the *Concept/Term Details* panel, the property displays in italics (to indicate that it is subscription content that was written to a local namespace). Click **Cancel** to ignore the new property.

Edit a Concept Property

Follow this procedure to view and/or edit a property that was created in a local namespace for a concept or term in a subscription namespace.

1. Drag the concept/term containing the property you want to view or edit from another panel and drop it on into the *Concept/Term Details* panel.
2. On the *Concept/Term Details* panel, expand the **Properties** folder to display existing properties for the concept/term.
3. Right-click on the property for which you want to view or edit details, then select **Modify Property** from the displayed options. (Properties created as local content display in italics; the **Modify Property** option is available for **these properties only**.) The *Modify Property* window displays.



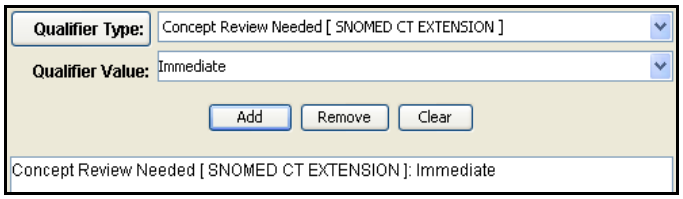
The concept/term from the *Concept/Term Details* panel displays in the *Concept/Term* field, and is not editable. The namespace in which the concept/term resides displays in brackets.

4. A property type is a pre-established identifier that defines the property. From the *Property Type* field dropdown list, select an alternate property definition to be assigned to the concept or term. If the *Concept/Term* is from a subscription namespace, the *Property Type* dropdown list includes only property types created in the current local namespace, listed alphabetically.

If the *Concept/Term* was created in a local namespace, the *Property Type* list includes property types created in the current local namespace, but **only** if the *Concept/Term* also was created in the current local namespace. If the concept/term was not created in the current local namespace, the *Property Type* field dropdown list will be empty. Refer to the *Property Types* discussions.

You have the option of **filtering** the property types that are available from the *Property Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a type from the *Property Type* field dropdown list, or select an alternate property type, only the pre-selected types will be available in the list. Refer to the *Filter Property Types* discussion earlier in the guide.

5. For the property type (definition) assigned to this concept or term, you can modify the property value in the *Property Value* text area.
6. For each property you can specify an established **qualifier type** and **value**; these provide additional detail regarding the nature of a concept or term property (e.g., **Current**). From the *Qualifier Type* field dropdown list, select the qualifier assigned to this property. The list includes only those **property** qualifier types that were created in the same local namespace where the selected property type was created; refer to the *Property Qualifier Types* discussions.
7. For the property qualifier (type) you selected for this concept or term, specify the qualifier value in the *Qualifier Value* field. For each property you can create multiple qualifiers with different qualifier types, or multiple occurrences of the same qualifier type, each with a separate value.
8. Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the display area in the lower portion of the window. See the illustration.



To remove an individual qualifier type/value combination from the property, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier type/value combinations, click **Clear**.

You have the option of **filtering** the property qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select a qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be available in the list. Refer to the *Filter Property Qualifier Types* discussion earlier in the guide.

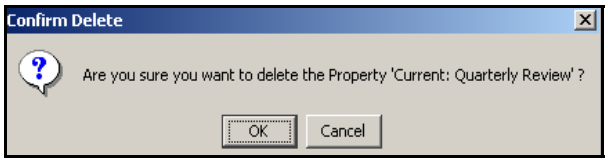
9. Click **OK** on the *Modify Property* window to add the property edits to the current local namespace. Click **Cancel** to ignore the edits.

Delete a Concept Property

Follow this procedure to delete an existing property from a concept, if the property was written to a local, writable namespace.

1. Drag the concept/term containing the property you want to delete into the *Concept/Term Details* panel.
2. On the *Concept/Term Details* panel, expand the **Properties** folder to display existing properties for the concept/term.
3. Right-click on the property you want to delete, then select **Delete Property** from the displayed options. Note that the **Delete Property** option is not available if the displayed concept exists in a namespace that is not writable.

   A delete confirmation window similar to the following displays.



4. Click **OK** to delete the concept/term property from the concept in the local namespace. Click **Cancel** to ignore the deletion.

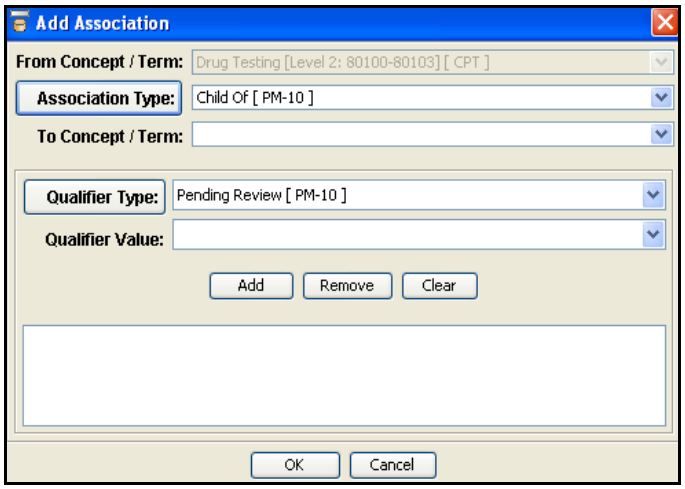
Create an Association

Use one of the following methods to add an association (with an association type established as local content in a local namespace) between concepts or terms in a subscription namespace. The association can be between concepts or terms within one namespace, or across different namespaces.

Create an Association – Click on Concept Name in the *Concept/Term Details* Panel

Follow this procedure to add an association definition and target concept value to the new concept by right clicking on the new concept name in the *Concept/Term Details* panel.

1. Drag the relationship **from** concept/term into the *Concept/Term Details* panel.
2. Right-click on the concept/term name on the *Concept/Term Details* panel, then select **Add Association** from the displayed options. The *Add Association* window displays.

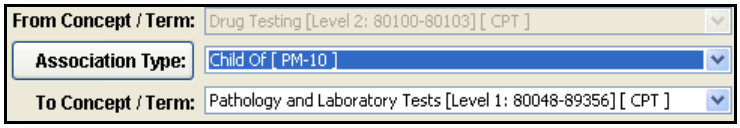


The **from** concept/term from the *Concept/Term Details* panel displays automatically in the *From Concept/Term* field, establishing the **From** portion of the **From/To** association between concepts or terms. The namespace in which the **from** concept resides displays in brackets.

3. From the *Association Type* field dropdown list, select the type of association (e.g., **Related To**, **Child Of**) you are creating between the concepts or terms. Association types from the current local namespace are listed alphabetically. Refer to the *Association Types* discussions.

   You have the option of **filtering** the association types that are available from the *Association Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Association Type* field dropdown list, or select an alternate association type, only the pre-selected types will be included in the list. Refer to the *Filter Association Types* discussion earlier in the guide.

4. From another displayed panel or window, drag the **target** concept/term in the association in the *To Concept/Term* dropdown field. The namespace in which the **to** concept resides displays in brackets to the right of the field.

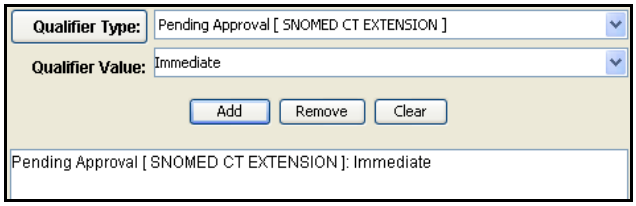


5. For each association you can add one or more qualifiers, each of which consists of an established qualifier type and value. Qualifiers provide additional detail regarding the nature of a concept or term association (e.g., **Usually**).
   From the *Qualifier Type* field dropdown list, select a qualifier type to assign to this association.

The list includes only those **association** qualifier types that were created in the same local namespace where the selected *Association Type* was created (refer to the *Association Qualifier Types* discussions). The namespace in which the qualifier type was created displays in brackets.

6. For the qualifier (type) you selected for this association, specify the qualifier value in the *Qualifier Value* field. For each association you can create multiple qualifiers of different types, or create occurrences of the same qualifier type, each with a separate value.

7. Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the display area in the lower portion of the window (see the illustration).



To remove an individual qualifier type/value combination from the association, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier type/value combinations, click **Clear**.

You have the option of **filtering** the association qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be included in the list. Refer to the *Filter Association Qualifier Types* discussion earlier in the guide.

8. Click **OK** on the *Add Association* window to add the association.

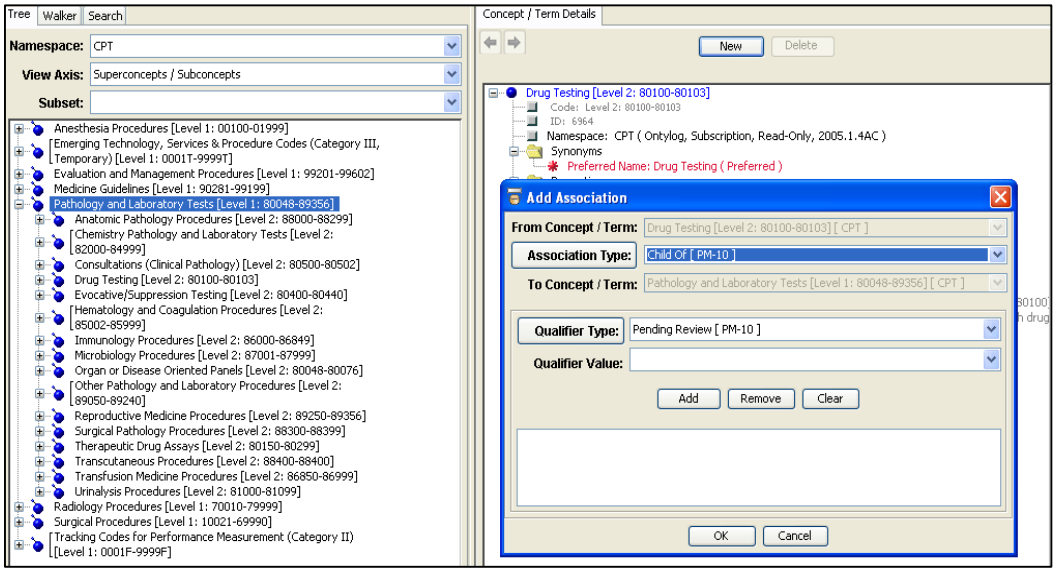
Create an Association – Control/Drag Concept into the *Concept/Term Details* Panel

Follow this procedure to create an association definition and target concept value for the new concept using the concept **Control/Drag** option.

1. Make sure the **from** concept for which you want to add an association (e.g., **Drug Testing**) displays in the *Concept/Term Details* panel.

2. From another displayed panel, or another instance of the *Concept/Term Details* panel, select the concept you want to add as the target concept in the association (e.g., **Pathology and Laboratory Tests**) then drag it to the *Concept/Term Details* panel. Hold the **Control** key down before you drop this concept into the *Concept/Term Details* panel. The *Add Association* window displays.

3. ***Both*** the **From** and **To** concept/terms display automatically in the appropriate fields. The namespace in which each concept resides displays in brackets.



From the *Association Type* field dropdown list, select the type of association (e.g., **Likened To**, **Related To**) you are creating between the concepts or terms. Association types from the current local namespace are listed alphabetically. Refer to the *Association Types* discussion.

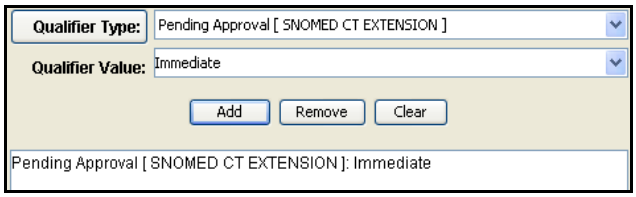
You have the option of **filtering** the association types that are available from the *Association Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Association Type* field dropdown list, or select an alternate association type, only the pre-selected types will be included in the list. Refer to the *Filter Association Types* discussion earlier in the guide.

4. For each association you can add one or more qualifiers, each of which consists of an established qualifier type and value. Qualifiers provide additional detail regarding the nature of a concept or term association (e.g., **Usually**).

   From the *Qualifier Type* field dropdown list, select a qualifier type to assign to this association. The list includes only those **association** qualifier types that were created in the same local namespace where the selected association type was created (refer to the *Association Qualifier Types* discussions). The namespace in which the qualifier type was created displays in brackets.

5. For the qualifier (type) you selected for this association, specify the qualifier value in the *Qualifier Value* field. For each association you can create multiple qualifiers of different types, or create occurrences of the same qualifier type, each with a separate value.

Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the area in the lower portion of the window. Note the illustration.



To remove an individual qualifier type/value combination from the association, highlight the appropriate line in the display area and click **Remove**. To clear all displayed qualifier type/value combinations, click **Clear**.

You have the option of **filtering** the association qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be included in the list. Refer to the *Filter Association Qualifier Types* discussion earlier in the guide.

6. Click **OK** on the *Add Association* window to add the association.

Create an Association – Control/Drag Association into the *Concept/Term Details* Panel

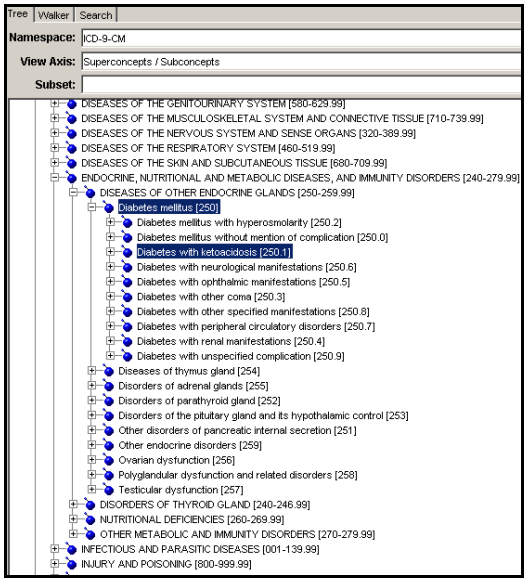
Follow this procedure to select an existing **local** association itself from a target concept displayed in another panel, then add the association itself to the new concept in the *Concept/Term Details* panel using the concept **Control/Drag** option.

1. Make sure the **from** concept for which you want to add an association (e.g., **Drug Testing**) displays in the *Concept/Term Details* panel.
2. From a **target** concept displayed in another panel or window (or in another instance of the *Concept/Term Details* panel) select the local association you want to add. Select the local association **itself** (**not** the concept); local associations display in italics.
3. Drag the **target** concept association to the *Concept/Term Details* panel where the association **from** concept is displayed. Hold the **Control** key down before you drop the **target** concept association into the *Concept/Term Details* panel where the from **concept** is displayed. The dragged **target** concept association displays (in italics) in the **Associations** folder for the association **from** concept displayed in the *Concept/Term Details* panel.

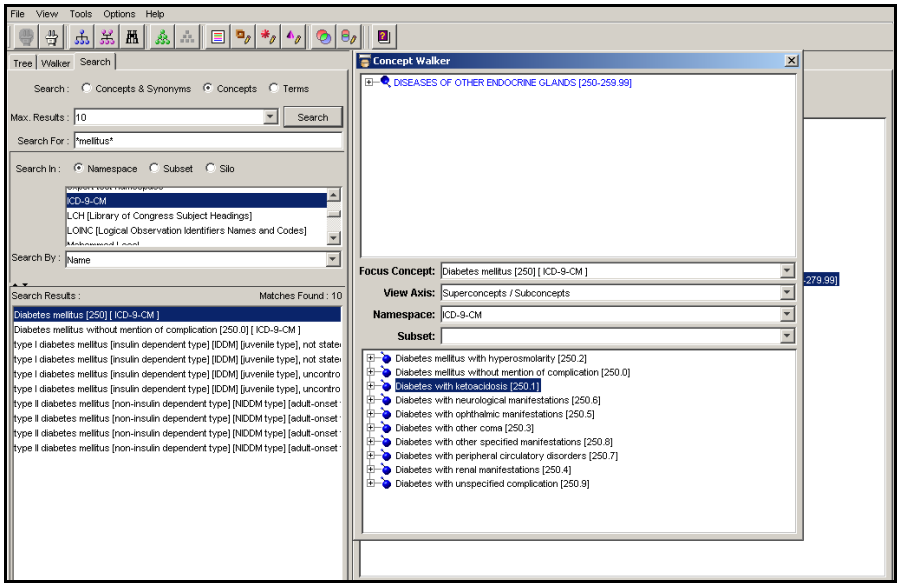
Create a Concept/Term Association within a Namespace

The following procedure illustrates how to create an association between concepts or terms within the same namespace. In the example shown, an association is created between two concepts in the **ICD-9-CM** namespace.

1. In the *DTS Editor Main* window, open one or more display panels that include the concepts or terms for which you want to create an association. The panel displays should reflect the same namespace (in this case, **ICD-9-CM**). In the illustration, the *Concept Tree* panel reflects both concepts that will be included in the association (**Diabetes mellitus** and **Diabetes with ketoacidosis**).

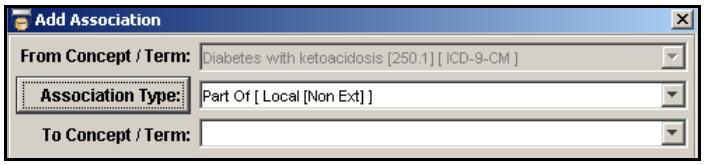


Another option is to open the *Search* panel in the left pane, which reflects the concept **Diabetes mellitus** in the **ICD-9-CM** namespace. The *Concept Walker* floating window reflects **Diabetes with ketoacidosis** as a child concept of **Diabetes mellitus**, also in the **ICD-9-CM** namespace. Note the illustration.



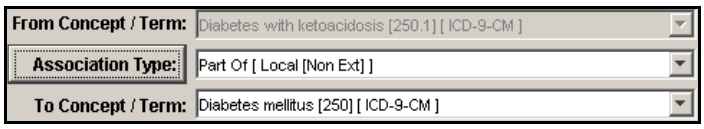
2. Drag the relationship **from** concept/term (i.e., **Diabetes with ketoacidosis**) into the *Concept/Term Details* panel.

3. Right-click on the concept/term name on the *Concept/Term Details* panel, then select **Add Association** from the displayed options. The *Add Association* window displays. The **from** concept/term from the *Concept/Term Details* panel (i.e., **Diabetes with ketoacidosis**) displays automatically in the *From Concept/Term* field, establishing the **From** portion of the **From/To** association between concepts or terms.



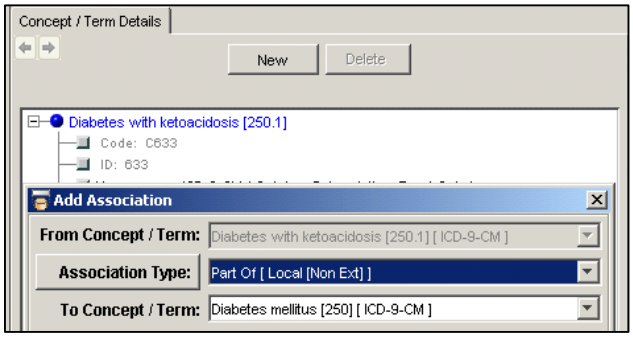
The association always is written to the *From Concept* namespace (in this case, **ICD-9-CM**), which displays in parentheses next to the concept/term.

4. Drag **Diabetes mellitus** from the other displayed panel and drop it into the *To Concept* field. The namespace (again, **ICD-9-CM**) displays in parentheses next to the concept/term.



5. The *Association Type* field dropdown list includes only association types created in the current local namespace; select the type of association you are establishing.

In the illustration, **Part Of** is selected; the local namespace in which that association was created displays in parentheses.



6. Select the appropriate qualifiers for this association using the *Qualifier Type* field dropdown list, then enter the value for each qualifier type.

7. Click **OK** to update the **ICD-9-CM** namespace with the association of the concept **Diabetes with ketoacidosis** as being **Part Of** the concept **Diabetes mellitus**. Click **Cancel** to ignore the new association.

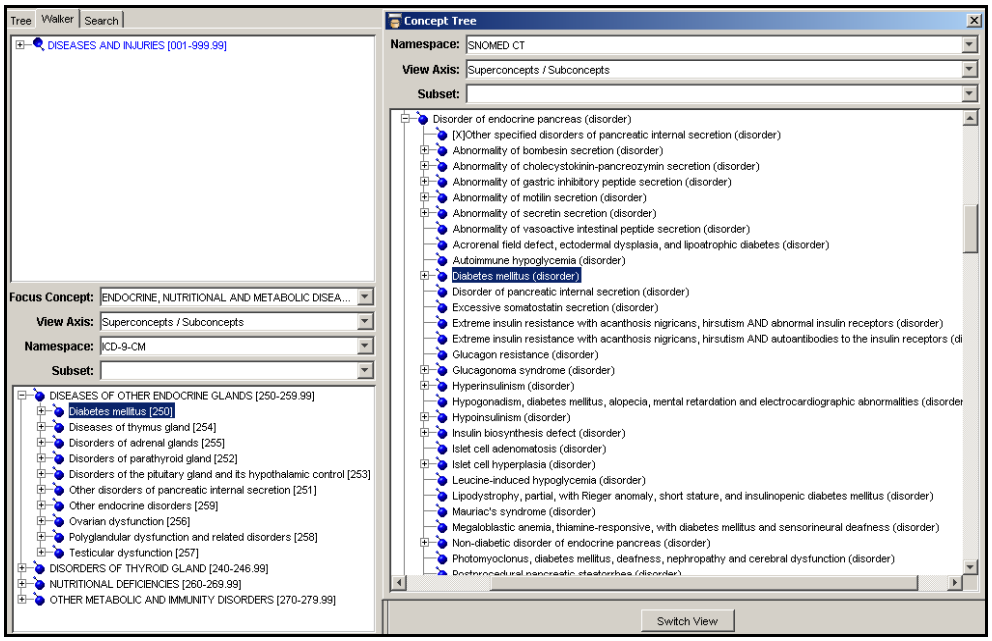
Map Concept/Terms across Namespaces

The DTS Editor allows you to create associations between concepts or terms across many namespaces. Using this **mapping** approach (i.e., creating sets of associations between concepts in two or more namespaces) you can map a single **From Concept** to many **To Concepts** across multiple namespaces.

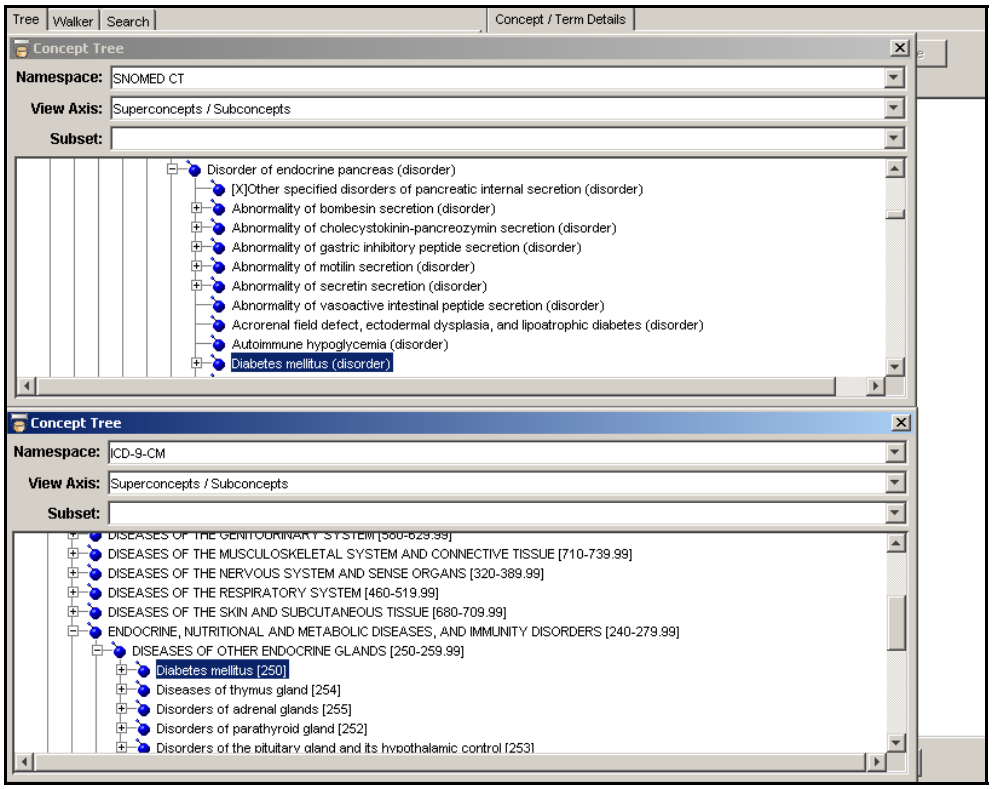
The following procedure illustrates how to create an association between concepts or terms across two namespaces. In the example shown, an association is created for the concept **diabetes mellitus**, which exists in both the **SNOMED CT** and **ICD-9-CM** namespaces.

1. Open two separate display panels in the *DTS Editor Main* window. The display in each should include the concept/term (each reflected in a separate namespace) for which you want to create an association.

   In the illustration, the *Concept Walker* panel reflects the concept **diabetes mellitus** in the **ICD-9-CM** namespace. The *Concept Tree* floating window reflects the concept **diabetes mellitus** in the **SNOMED CT** namespace.

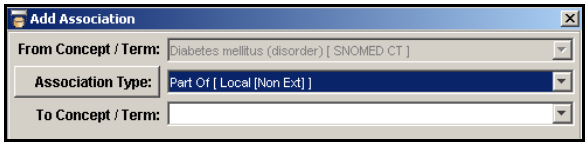


Another option is to open two instances of the *Concept Tree* floating window, each of which include the concept **diabetes mellitus** in its respective namespace. Note the following illustration.



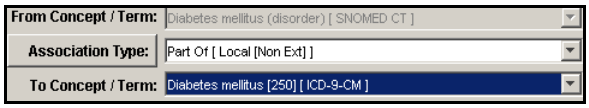
2. Drag the relationship **from** concept/term, **Diabetes mellitus** in the **from** namespace (i.e., **SNOMED-CT**) into the *Concept/Term Details* panel.

3. Right-click on the concept/term name on the *Concept/Term Details* panel, then select **Add Association** from the displayed options. The *Add Association* window displays. The **from** concept/term from the *Concept/Term Details* panel (i.e., **Diabetes mellitus**) displays automatically in the *From Concept/Term* field, establishing the **From** portion of the **From/To** association between concepts or terms.



   The association always is written to the *From Concept* namespace (in this case, **SNOMED-CT**), which displays in parentheses next to the concept/term name.

4. Drag the relationship **to** concept/term, **Diabetes mellitus** in the **to** namespace (i.e., **ICD-9-CM**) and drop it into the *To Concept* field on the *Associations* window. The namespace (in this case, **ICD-9-CM**) displays in parentheses next to the concept/term.



5. The *Association Type* field dropdown list includes only association types created in the current local namespace; select the type of association you are establishing. In the illustration, **Same As** is selected; the local namespace in which that association was created displays in parentheses.

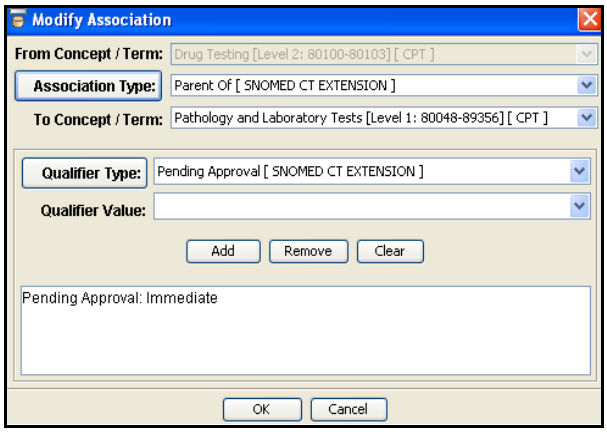
6. Select the appropriate qualifiers for this association using the *Qualifier Type* field dropdown list, then enter the value for each qualifier type.

7. Click **OK** to update the **SNOMED CT** namespace with the association of the concept **diabetes mellitus** between the namespaces **SNOMED CT** and **ICD-9-CM**. Click **Cancel** to ignore the new association.

View and Edit an Existing Association

Follow this procedure to view or edit an association definition and target concept value for a concept by right clicking on the concept name in the *Concept/Term Details* panel.

1. Drag the **from** concept/term in the from/to relationship you want to view into the *Concept/Term Details* panel.
2. On the *Concept/Term Details* panel, expand the **Associations** folder to display existing associations for the concept.
3. Right-click on the association for which you want to view or edit details, then select **Modify Association** from the displayed options. The *Modify Association* window displays.



The concept/term from the *Concept/Term Details* panel displays in the *From Concept/Term* (drop target) field; this establishes the **From** portion of the **From/To** association. The namespace in which the **from** concept resides displays in brackets.

The target concept/term in the association displays in the *To Concept/Term* (drop target) field. The type of association (e.g., **Approach**) that was established displays in the *Association Type* field.

4. The modified association that you enter will be written to the local namespace where the association type is defined. In the *Association Type* field list, select the type of association between the concepts or terms. Association types from the current local namespace are listed alphabetically (see *Association Types*).

   You have the option of **filtering** the association types that are available from the *Association Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association type from the *Association Type* field dropdown list, or select an alternate association type, only the pre-selected types will be included in the list. Refer to the *Filter Association Types* discussion.

5. For each association you can add or remove one or more qualifiers, each of which consists of an established qualifier type and value. Qualifiers provide additional detail regarding the nature of a concept or term association (e.g., **Usually**). From the *Qualifier Type* field dropdown list, select a new qualifier type to assign to this association. The list includes only those **association** qualifier types that were created in the same local namespace where the selected association type was created.

6. Click **Add** after you specify the *Qualifier Type* and *Qualifier Value*; both are added to the display area in the lower portion of the window.

   To remove an individual qualifier type/value combination from the association, highlight the appropriate line in the display area and click **Remove**. To clear all existing qualifier type/value combinations, click **Clear**.

   You have the option of **filtering** the association qualifier types that are available from the *Qualifier Type* field dropdown list by creating a pre-defined, filtered list of types. When you attempt to select an association qualifier type from the *Qualifier Type* field dropdown list, or select an alternate *Qualifier* type, only the pre-selected types will be included in the list. Refer to the *Filter Association Qualifier Types* discussion earlier in the guide.

7. Click **OK** to update the knowledgebase with your association edits. Click **Cancel** to ignore the edits.

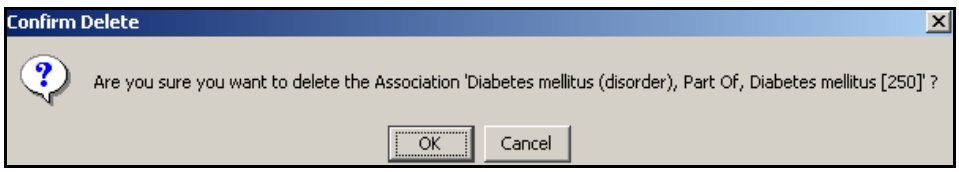
Delete an Association

Follow this procedure to delete an association that exists between concepts or terms within a namespace, or across namespaces. The association type for the association you want to delete must exist in a local namespace in order for you to delete the association.

1. Drag the **from** concept/term in the association you want to delete into the *Concept/Term Details* panel.

2. On the *Concept/Term Details* panel, expand the **Associations** folder to display existing associations for the concept.

3. Right-click on the association you want to delete (in a subscription namespace, the association should be in italics) then select **Delete Association** from the displayed options. A delete confirmation window displays.



4. Click **OK** to delete the concept/term association from the local namespace to which it was written originally. Click **Cancel** to ignore the deletion.

Code and ID Generator

Introduction

Concept codes and concept IDs are identifiers generated automatically and assigned to each new concept or term you create through the DTS Editor. The concept code and ID display in the *Concept Tree* panel (in parentheses) next to each concept name when you right-click on the concept name.

The default format for each new generated ID is the next available number in sequence. The default format for each new code generated is a prefix of letter **C** for concepts, or letter **T** for terms, followed by the next available number in sequence (e.g., **C1**, **C2**, **C3**, **T1**, **T2**, **T3**, etc.). The default format for new concept code and ID generation is defined in the class **com.apelon.dts.client.plugins.DefaultCodeAndIdGenerator**.

You have the option of writing and "registering" one or more **customized code and ID generators**. Each new generator can define parameters for generation of **new** codes and IDs based on formats of your own design. Each new generator would extend **CodeAndIdGenerator** based on the new class in **com.apelon.dts.client.common**.

To create a new code and ID generator, you first must **write** and **compile** a java class for it (and place the compiled custom code and ID generator under a plugins subfolder of their DTS installation). You then must **register** the new code generator .class file (which makes it the current generator for creation of codes and IDs for new concepts or terms in the DTS Editor). Procedures for each of these steps are provided.

Writing and Compiling a Code and ID Generator

A code generator is a java class that must extend the abstract CodeAndIdGenerator class found in **package: com.apelon.dts.client.common**. There are three methods that must be implemented in the java class, **getCode** (DTSobjectconceptOrTerm) **getId** (DTSobjectconceptOrTerm) and **getDescription**(). Each method is described.

- **getCode**(DTSobject conceptOrTerm) – the return value from this method will be passed to the concept for which a code must be assigned. This method should return a Java string type of 32 characters or less. This code will be assigned to the concept when the concept is saved in the DTS Editor.
- **getDescription**() will return a Java string that describes the code generation method for this code generation class. You will see this description in the DTS Editor, when you select a code generator from the *Register Code Generator* window (this window is discussed in detail later).
- **getId** (DTSobject conceptOrTerm)

An example of a code generator class is shown; note that the .class file must have a unique name. The methods described are shown in the example.

```
package com.apelon.dts.client.plugins;

import com.apelon.apelonserver.client.ServerConnection;
import com.apelon.dts.client.common.CodeAndIDGenerator;
import com.apelon.dts.client.common.DTSObject;
import com.apelon.dts.client.term.Term;

import java.util.Random;

/**
 * Sample code and ID generator that generates a random ID and corresponding
 * code for the passed concept or term.
 */
public class SampleCodeAndIdGenerator extends CodeAndIDGenerator {
  private String fCode;
  private int fId = -1;

  /**
   * Constructor passing server connection.  The server connection can be used
   * to instantiate DTS query classes in case they are needed to determine a
   * unique code and ID.  The server connection is not used in this sample code
   * and ID generator.
   *
   * @param      sc              server connection
   */
  public SampleCodeAndIdGenerator(ServerConnection sc) {
    super(sc);
  }

  public String getCode(DTSObject conceptOrTerm) {
    if (fCode == null) {
      setRandomCodeAndID(conceptOrTerm);
    }

    return fCode;
  }

  private void setRandomCodeAndID(DTSObject conceptOrTerm) {
    Random r = new Random();
    fId = r.nextInt();
    if (conceptOrTerm instanceof Term) {
      fCode = "T" + fId;
    } else {
      fCode = "C" + fId;
    }
  }

  public int getId(DTSObject conceptOrTerm) {
    if (fId == -1) {
      setRandomCodeAndID(conceptOrTerm);
    }

    return fId;
  }

  public String getDescription() {
    return "Generates a random ID for a new concept or term.  "
    + "For the code it prepends a capital \"C\" to the generated ID of a concept, "
    + "or a capital \"T\" to the ID of a term.";
  }
}
```

Note: Code generators must be placed in **package: com.apelon.dts.client.plugins** and must extend **class: com.apelon.dts.client.common.CodeAndIdGenerator**.

The **compplugins.bat** file included in the DTS install is located in the **bin\editor** directory, under the DTS main directory. To compile a code and ID generator source file, place the source file in this directory:

***DTSInstall*\plugins\src\com\apelon\dts\client\plugins**

Run the **compplugins.bat** file. You must have the path to your JDK on your PATH environment variable for this .bat file to compile your code and ID generator. Your compiled code and ID generator now will be available in the DTS Editor.

You also may use your own third-party java source editor (e.g., JBuilder, Visual Age) to compile your code and ID generator. You will need the ApelonDTS.jar on your CLASSPATH to compile; this .jar file will contain the CodeAnd IdGenerator class that all code and ID generators must extend.

After you compile the class successfully, place the resulting .class file into this directory on your local hard drive:

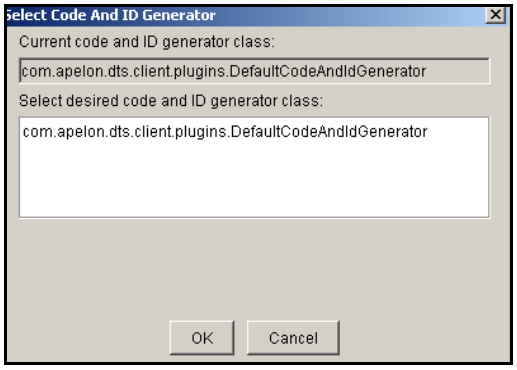
Apelon\ *DTSInstall*\plugins\classes\com\apelon\dts\client\plugins

This path originates from the location of your DTS Editor install. Only code and ID generators placed in this directory will be available while using the DTS Editor.

Registering a Code and ID Generator

Follow these procedures to register a new code and ID generator. All concepts created thereafter will have codes and IDs generated based on the registered generator parameters.

1. Select **Code and ID Generator** from the *DTS Editor* main window **Options** menu. The *Select Code and ID Generator* window displays.

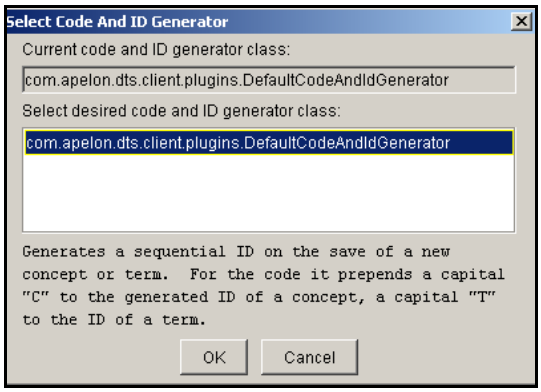


   The window lists each code and ID generator for which a Java class file was created, compiled, and placed in the **plugins\classes\com\apelon\dts\client\ plugins** directory. The code and ID generator currently in effect displays at the top of the window.

Note: The sample file **DefaultCodeAndIdGenerator.java** is included in the **plugins\src\com\apelon\dts\client\plugins** directory. Run the file **compplugins.bat** in the ***DTSInstall*\bin\editor** directory to compile this Java file for the sample code and ID generator.

com.apelon.dts.client.plugins.DefaultCodeAndIdGenerator then displays as an option in the *Select Code and ID Generator* window.

2. Click the desired code and ID generator to select it. A brief description of the code format that is generated displays.



The default format for each new generated ID is the next available number in sequence. The default format for each new code generated is the newly generated ID, with a prefix of letter **C** for concepts, or letter **T** for terms (e.g., the new IDs **1**, **2**, and **3** would generate codes of **C1**, **C2**, **C3**, etc, for concepts, and **T1**, **T2**, **T3**, etc. for terms).

3. Click **OK** to register the new code and ID generator. Each new concept created from this point will be assigned an ID and code based on the associated generator parameters in the java class file.

Duplicate Codes

If the new code and ID generator you registered creates a code that is identical to one already in the knowledgebase, a message displays indicating that **The concept/term already exists!**.

You have the following two options at this point:

1. Click **OK**. The concept or term will not be created. Try creating the concept or term again; possibly the code and ID generator will generate a unique code and ID the next time.

2. If duplicate codes are being generated on a consistent basis, register a different or updated code and ID generator on the *Select Code and ID Generator* window.

Sample Code and ID Generator

An alternative, "sample" code and ID generator is available with DTS . Rather than automatically generating a code and ID like the default code and ID generator, it permits you to manually enter the code and ID for a new concept or term.

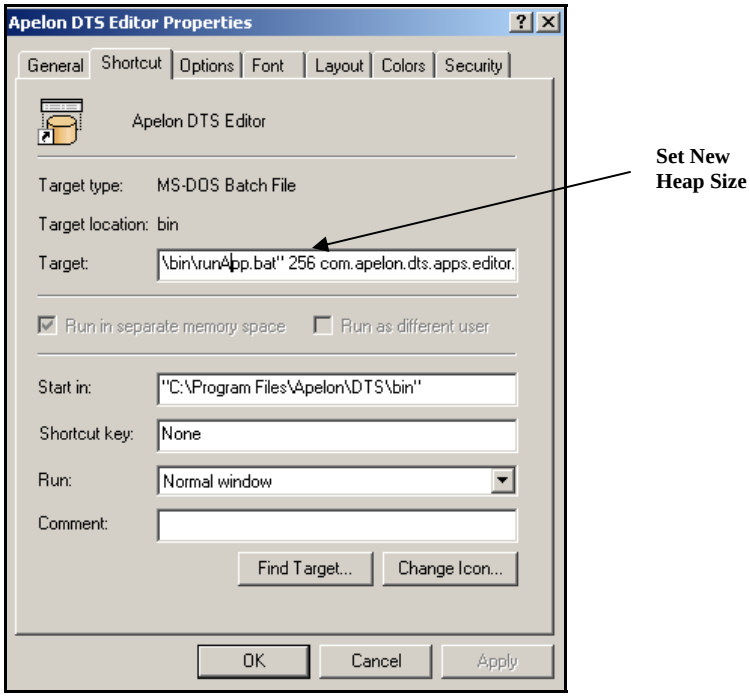
The class name is **com.apelon.dts.client.plugins.PromptForCodeAndId**; it will be included in the list of code and ID generators until you compile it by running the **compplugins.bat** file. The source in ***DTSInstall*\plugins\src\com\apelon\dts\client\plugins** will be compiled into the output directory ***DTSInstall*\plugins\classes\com\apelon \dts\client\plugins**.

Appendix A – Adjust Memory for Remote JDBC Connections

DTS loads the Lexicon dictionary whenever you perform a silo search using the DTS Editor. If you use a **Remote JDBC** connection to the database, and experience **Out of Memory** errors when you attempt silo searches, you may need to increase the amount of **heap** memory configured for the DTS Editor.

Perform the following procedure to adjust the installed heap memory.

1. Right-click the Apelon DTS Editor selection on the *Windows* Start menu (**Programs>Apelon>*DTSInstall*>Apelon DTS Editor**).
2. When the options list displays, click **Properties**. The *Apelon DTS Editor Properties* window displays, with the **Shortcut** tab selected.



3. In the *Target* field, set the value for the first argument to the desired maximum Java heap size (consider the total amount of memory you have available when deciding how much to allocate to the DTS Editor). Replace the installed default value of **256**, which refers to the amount of heap memory in megabytes.
4. Click **OK** to reset the heap size value.
5. Confirm that the Apelon DTS Server is running (**Start>Programs>Apelon>*DTSInstall*>Start Apelon DTS Server**) then start the DTS Editor.

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